ICPUG Software Libraries

niser: Joe Griffin, Clovelly, Lynwick St, Rudgwick, Horsham, W Sussex
12 3DJ

Please remember that the libraries are operated on an entirely voluntary basis and, unlike many of the American User Groups, ICPUG DOES NOT CHARGE A COPYING FEE.

The Libraries contain PUBLIC DOMAIN programs from a wide range of sources, including our own members and other user groups. WE DO NOT SUPPORT SOFTWARE PIRACY.

Members may obtain ALL the library material. In order to retain a measure of control over the work-load imposed on the Copiers, however, we do restrict the amount of material that may be obtained on any one request.

Disk users may obtain up to two disk copies at a time (Amiga five).
Tape users may obtain up to four programs, from any one disk.
(Please use a C-60 or C-90 tape —a C-15 or C-30 may be too short.)

To obtain copies of catalogue or library disks, please send:

A statement of what you want
Your membership number
Disks (stating FORMAT — type of drive — required) or Tape
  We will NOT use a disk as a 'flippy' as it can damage the disk drive
Pre-addressed reusable packaging suitable for return
  There have been occasions when disks have arrived bent in half!
  Please ensure that packing is adequate
Return postage — SEND STAMPS
  Overseas members should send International Reply Coupons
    (allow at least one-and-a-half IRCs per disk sent)

PET — Joe Griffin (see above)

VIC — Joe Griffin (see above)

COMAL — Brian Grainger, 73 Minehead Way, Stevenage, Herts SG1 2HZ

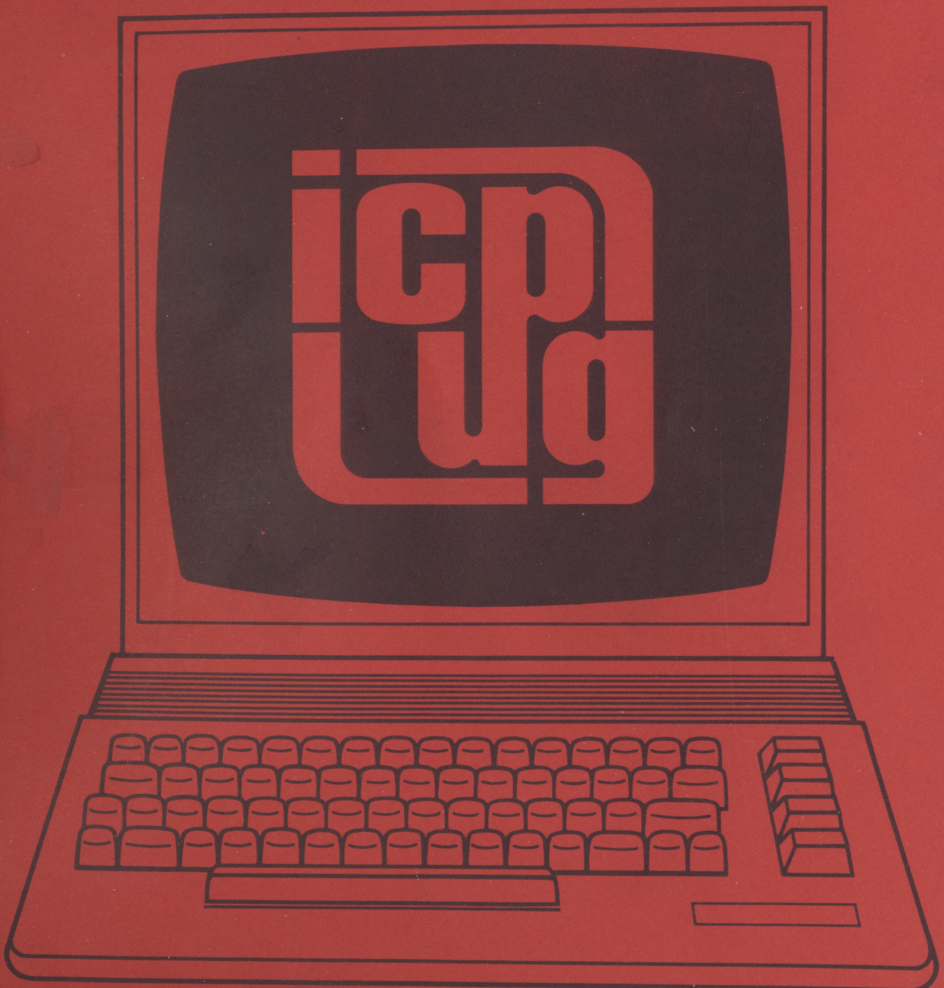
1520 Plotter — WGC Austin, School of Geography, Faculty of Humanities,
Newcastle Polytechnic, Lipman Building, Sandyford Rd,
Newcastle upon Tyne NE1 8ST

1520 (Tape) — John Bentley, 38 Conway Rd, Taplow, Maidenhead, Berks SL6 0LD

PC Organiser: Tim Arnot, 68 Cowley Road, Littlemore, Oxford
Please always send your requests to the copier listed below who deals with the Catalogue Category of material you want. Catalogue from John Robinson, 1 St James Court, Cliff Gardens, Scunthorpe, S. Humberside DN15 7PR

A–D Henry Velleman, 52 Ventnor Drive, Totteridge, London N20 8BS
E–O Peter Crowder, 27 Crawford Drive, Liverpool L15 8AE
P–Z David Harrow, 28 Phoenix Drive, Wateringbury, Maidstone, Kent ME18 5DR

INDEPENDENT COMMODORE PRODUCTS USERS GROUP



Europe's first independent magazine for CBM users

Volume 10 Jul/Aug 1988 Number 4

HONORARY NATIONAL OFFICIALS

Chairman - John Bickerstaff
45 Brookscroft, Linton Glade, Croydon CR0 9NA Tel:01-651 5436 (after 8.30pm)

Vice-Chairman - Joe Griffin
Clovelly, Lynwick St, Rudgwick, Horsham, Sussex RH12 3DJ

Treasurer - Jennifer Goldsmith
5 Solar Court, Etchingham Park Rd, London N3 2DZ

Membership Secretary - Jack Cohen Tel:01-597 1229 (day)
30 Brancaster Road, Newbury Park, Ilford, Essex IG2 7EP 01-346 0050 (eve)

Assistant Membership Secretary - Andrew Cohen (see above)

Discounts Officer - John Bickerstaff (see above)

Editor - Bill Bremner
Clouds Cottage, 66 Duck St, Sutton Veny, Warminster, Wilts BA12 7AL

Co-Editor - Iain Graves (Submissions on 3.5" Amiga format)
21 Oatlands, Gossops Green, Crawley, W Sussex RH11 8EE

Co-Editor - Peter Hauke (Letters & For Sale/Wanted adverts)
1 Montpelier Rd, Ealing, London W5 2QS

Display Advertising Manager - Peter Hauke (see above)

Exhibitions Organiser - Janet Bickerstaff
45 Brookscroft, Linton Glade, Croydon CR0 9NA

Regional Organiser - Brian Wise
17 Knighton Close, South Croydon, Surrey CR2 6DP

Technical Adviser - Tom Cranstoun
107 Dalmally Road, Addiscombe, Croydon CR0 6LY

Technical Co-ordinator - Bavin Clarke
Uplands, Burry Port, Dyfed SA16 0TD

Languages - Brian Grainger
73 Minehead Way, Stevenage, Herts SG1 2HZ Systel 438727925

Disability Liaison - David Bate
71 Bedford Road, Bootle, Merseyside L20 7DN

Software Librarians - see last page and inside back cover

Disclaimer. This Newsletter reprints the ideas and expressions of the members of ICPUG and is circulated to ICPUG members only by subscription. The views and opinions contained within are not necessarily those of the Editor of the Newsletter and/or the ICPUG committee. The Editor and the Committee expressly disclaim responsibility for the ideas and expressions contained in the ICPUG Newsletter.

---

icpug newsletter

Vol 10 No 4
Jul/Aug 1988

Contents

FEATURES

Fontfacts: Secrets and Tips — Lion Kuntz 372
11th Commodore Show Report — Janet Bickerstaff 388
Hardware Repairs — Nick Holford 392
2031 Hardware Bug — Joe Griffin 406
700 Scene — Joe Griffin 412
Bits, Bytes and Words — Brian Grainger 428
Disk Quality and Repair — Jim Butterfield 443
Pen Pal Corner — Ian Cassidy and Mark Stanton 457
Mid-Thames Group - Re-Christened — Mike Hatt 460
South West Regional Group Report — SW Group 462
Amiga Public Domain Programs — Pete Miles 467

COLUMNS

Chairman's Chatter — John Bickerstaff 386
Super* Corner — Peter Hauke 393
Amiga Watch — Mike Todd 416
Texas Tales — Betty Clay 438
Mike's Meanderings — Mike Todd 450

PROGRAMMING/APPLICATIONS

PET Prattle - 3 — Joe Griffin 408
Spreadsheets - 2 — Brian Grainger 422
Kernal Calls - 2 — Ian Cassidy 436
Script/Plus Update — Richard G Hunt 444
The Next Solution — Miscellaneous 448

REVIEWS

BASIC 8 — Charles Hooker 407
Star LC-10C Printer — James Hall 413
Professional Page — Peter Hauke and Bill Bremner 431
64 to PC — WGC Austin 455

REGULARS

Editor's Notebook 370
Commodore News 371
Compunet 456
Regional News 458
128 Library 463
C64 Library 464
COMAL library 472
Discount Corner 478
Back Issues 480
Readers Write . . . 482
For Sale & Wanted 490

EDITOR'S NOTEBOOK

I left the Commodore show with some strong, and happy, impressions. The first, though not greatly in evidence, was the continuing strength and support for 8-bit machines. A product as wide selling and popular as the Commodore 64 simply does not die overnight. It has passed through youth and middle age with flying colours, and now grows old gracefully. It is at that respectable (venerable in the case of any other computer) time of life when it can sit back and trflect on a successful and rewarding career. Far from retiring, it is even re-discovering its younger days with every satisfied new user. It is comfortably well-known, yet neither scorned nor derided as "past it". Long live the 64!

The Amiga, on the other hand, is still a relatively "new" kid on the block. Having weathered its first storms (unaided, more often than not) it is settling down to what appears to be a potentially solid career, and is spreading some roots (or is that routes?). Commodore seemed to have a problem child on their hands at first. Far from being an easy machine to sell, with its powerful and versatile capabilities it began to develop an identity crisis. It was too much machine. Marketing strategies appeared confused at the best of times, and before long the machine looked to be another looser on its way to Skid Row. Fortunately, like the 64, the Amiga has enough common sense to be able to sell itself. Even more fortunate is the powers-that-be have recognised this.

As a Graphics Workstation, the Amiga faces stiff competition from the Atari ABAQ and Acorn Archimedes. Both these machines boast faster, more powerful and versatile graphics capabilities than the Amiga. This is not the way to sell the Amiga. To realise its potential, it must be marketed away from individual niches, and sold as the all-round creative personal computer, which it is. The Amiga is at last being taken seriously by software and hardware companies. Commodore have begun to realise that, and are now building applications around it. Music, video, graphics, design, publishing, Unix, AT-Compatible. What is the Amiga? More important: what is it not?

Competition

When is a newsletter not a newsletter? When it is the official publication of a successful and expanding user group. There is much argument as to whether that which you presently grip in your digits is a newsletter, journal, magazine, gazette, periodical, book or whatever. So instead of confusing the issue (I mean the situation, of course) further, we have decided to open the forum and let you choose a NAME for the poor rag. Telegram, Moon, or Reflective Surface, are not allowed; Disk Driver, GOTO . . . and so on, are. A year's free subscription to a staple-bound printed collection of text is the prize. Suggestions to your Editor please.

Newsletter Deadline

The copy deadline for the next issue is Wednesday 7th September

Technical Register

Apparently, some of you haven't returned your Technical Help Register forms to Bavin Clarke, the Technical Co-ordinator. Not only that, but some of you have been sending them to the wrong address. The correct address to send last issue's yellow insert is under Bavin's Name on the inside front cover.

⁂

COMMODORE NEWS

Commodore Show

Commodore Launches C64 Olympic Package. Complete with ten games, joystick and ZCON cassette unit (1530). Games include boxing, Daley Thompson Decathlon, tennis, snooker, track and field, baseball etc. Retail price £149.99.

Price of Amiga 500 cut by £100 to £399 retail.

30th June 1988

Tom Hart leaves Commodore to take up senior Operations position with the Unisys Corporation. Jim Housego will head Commodore Operations division and Steve Franklin will become directly responsible for the Sales division.

Janet Bickerstaff

CURRENT MEMBERSHIP FIGURES

PET/CBM	397	Plus4	330	Cassette	2212
64	1976	C16	79	Disk	3432
VIC	361	700	42	Printer	2925
Amiga	1351	128	1214	Modem	873
PC	106			Monitor	1974

⁂

FONTFACTS: SECRETS AND TIPS

by Lion Kuntz (C) Copyright September 1987

Amiga fonts are the cornerstone of desktop publishing, and the most vital ingredient in desktop video presentations, but seem to be considered of little or no value by many. Even programmers who set out to create the most impressive page make-up programs seem unable to understand how to implement font manipulation in their programs in an easy and painfree manner. Companies that market their products as being business presentation, video title, and flashy advertising design packages forget to provide the user with an easy way of loading and using fonts.

Why is there so much mystery surrounding fonts, and why has it been the last feature of the Amiga to be provided with a standard form of access?

I served in the graphic arts field as editor, art director, and typographer for small local magazines and newspapers, and I had to select typestyles, hire type shops, and proofread copy before print. I would like to explain some of the differences between typography and Amiga Fonts, and the variations in Amiga programs which use fonts.

Everyone has heard of Guttenberg, the first printer to use mass-production methods, but how many people know that today's complete alphabet had not been invented in Guttenberg's time? The letters J, U, and W were spoken but not printed until several centuries later. The written language has continuously evolved over the last centuries, and the Amiga is a current example of the latest efforts to provide communication between persons.

The Amiga screen is "painted" using guided electron beams, constantly being changed or "refreshed" 60 times per second [60Hz in the USA, 50Hz in Europe - Ed.]. There are three electron beams: Red, Green, and Blue [hence RGB - Ed.], and they travel across the face of the screen leaving lines of coloured dots glowing behind them. Thus, it is possible to change the typeface and the look of the printed word faster than the eye can follow. The Amiga provides animated, colour-cycling, multi-colour, and scrolling fonts, and more. The user sees only the dots of light on the screen and never knows what methods are exploited by the programmers to produce those effects. It can be frustrating to find that fonts are not compatible with some programs, or the printout may look considerably different than the screen image.

Let me define FONT. A font is a single instance of a set of characters in a single size, with one single picture of each character in the set. A font may have only one character, or hundreds, or any number in-between. On the Amiga computer there are a number of different kinds. The two ROM-fonts, Topaz 8 and Topaz 9, are always available in memory for all programs to use, and are part of the KickStart operating system. A second, more common type is DISK-font, stored as software modules on disk, and loaded into programs on request. A sub-category of DISK-font is COLOR-font, which shares all the attributes of a standard DISK-font, but adds information about additional colours to embellish the characters. Other variations are the STROKE-font and POLYGON-font, which differ from the previous in important ways.

Most Amiga owners will be using DISK-fonts. These are the ones used in Deluxe Paint II, PageSetter, Publisher 1000, City Desk, Shakespeare, Deluxe Print, Notepad, Deluxe Video, Images, Express Paint, E/FX, WordPerfect, Fast Fonts, TV*Text, SetFont, VisaWrite, ProWrite, Genlock Titler, and, to some extent, with CGI Pro Video, and Aegis VideoTitler. New titles are being released weekly, so there are, and will be, more programs using DISK-fonts.

DISK-fonts are sets of software data which come in three components:

1) A home directory with an important entry called the dot font file. This has the same name as the font itself, with a five character suffix: .font.

2) A sub-directory in the home directory with the same name as the font itself.

3) A datafile inside the font directory which is itself inside the home directory.

The dot-font file serves two important purposes: it is a pointer and an index. As the former, it points to the font directory of its prefix namesake. As an index, it keeps an accurate list of what datafiles are actually contained in the font directory, and some attributes of the fonts found there.

The AmigaDOS makes some assumptions about important things on start-up when you put the WorkBench disk in DF0:.

Certain ASSIGNments are made at that time, being: SYS:, C:, S:, L:, LIBS:, DEVS:, and FONTS:. Unless you change these the Amiga Operating System will default to the boot-up WorkBench disk, to a directory named fonts, as the home directory of your supply of fonts. If there is no FONTS directory on your WorkBench disk, it defaults to the ROM-fonts.

You can change where the system searches for fonts using the CLI command ASSIGN. Consult a good AmigaDOS manual on the use of ASSIGN. Inter/Active Softworks of San Francisco provide an icon to click to enter a new font home directory path from the WorkBench screen, and this FontAssign program is provided with Calligrapher, and other of their products. The FontAssign program has been generously placed in the public domain by the publisher and may be found at your local users group library or favorite BBS.

You may safely store other files in the fonts home directory, since the operating system examines each file for the .font suffix to determine which are fonts and which are not.

Programmers may employ a direct method of locating fonts, bypassing the operating system. The program can be instructed to take a direct path to some specific location and load font files with some specific name or extension suffix. This is rare now but was seen on program disks at the time of the Amiga release, and is still used for some games.

Programmers may also decide to use some or all of the information contained in the dot-font pointer/index files. This is a cause of erratic operation between programs as fonts may or may not be successfully loaded.

An example of a common problem is when users, on finding space limited on their WorkBench disk, may delete some font datafiles of sizes they never use. They do not rebuild the dot-font file, and the index still records the existence of deleted fonts. In this case Deluxe Paint II will find the remaining fonts and provide a list of available sizes which do actually exist. This is because DPaint II ignores the index part of the dot-font file, and only uses the pointer to find the existing sizes. Notepad and Pagesetter, on the other hand, examine the index portion of the dot-font file, and look at the font directory to see that all fonts listed do actually exist. If Notepad or Pagesetter discover a discrepancy they assume that something is seriously wrong with the dot-font file and ignore all fonts it points to. In other words, as far as these two programs are concerned, if you delete one size you might as well delete them all, because none will be used until you rebuild the dot-font file.

Rebuilding a dot-font file is easy with another utility from Inter/Active called FontFixer. Again, this is provided free on Calligrapher and other products from the publisher, and has again been generously placed in public domain.

If your dot-font file is updated correctly, programs should be able to find and load all sizes of existing fonts in the fonts home directory.

If you are using a hard drive for font storage you will soon discover that your list of sizes grows too immense to be displayed by pull-down menus. You should seriously consider waiting on a product which uses pull-down menus for font lists, until the publisher releases a newer version with a requestor window for font selection. DPaint II features an unpleasant surprise for long lists: if the bottom of the pull-down menu touches the bottom of the screen your screen blanks. It appears that imminent GURU failure is due. This is harmless, but it does prevent you from using your fonts.

Since there are now hundreds of fonts, completely filling many disks, being able to handle a large amount of fonts, and swap between font disks, is important to users. Programmers have not addressed this problem adequately so far.

There is a temporary solution I use, but it has a potentially dangerous effect. Using a trick in the Operating System you can relabel disks you use for font collections to name FONTS. The operating system gives a higher priority to disks than to directories. It also ASSIGNs disks automatically while they are mounted, so a disk named FONTS becomes a disk named FONTS: (note the colon after the name). Unless the disk is relabelled you will not be able to re-ASSIGN fonts. But as soon as the disk is inserted it becomes the home directory for fonts while it remains in the drive. Take the disk out and your previously ASSIGNed fonts home directory is active again. There is nothing to click, and nothing to type using this method. You can insert and remove disks with different font collections to use in one single project using this trick.

The danger is that all fonts collection disks have the exact same name: FONTS. If you ever forget and insert two disks of the exact same name, you confuse the operating system and it has to go to the GURU to ask for advice. Another important thing to remember is to put the disk in the drive BEFORE the system sends out for the list of fonts available in the fonts home directory. Notepad goes looking for fonts before it even gets to the opening screen of the program, so the fonts disk must be in the drive already, or it will only find the ROM fonts. DPaint loads the list when you select Load Fonts Dir from the fonts pull-down menu. PageSetter loads the fonts list when you select a document to edit, or select a box to create.

To make your special fonts disks you must keep in mind that the DISK is acting as the fonts home directory. The level of the disk where all directories start is called the root, and it branches, and sub-branches into what they call a tree structure. The dot-font files must be in the root. They cannot be in any directory at all. The fonts themselves also need to have their directories in the root, and the individual font sizes datafiles must be inside their correct font directories as recorded in the index files. This is too much hacking around for the long term, but it solves an immediate problem.

To swap lists of fonts at anytime is not possible with most programs. Pagesetter loads only the requested fonts and retains them continually in memory until free memory space gets cramped. Even when you exit PageSetter after working with some fonts, re-enter the program and start using a new set of fonts from another disk or directory, the previous fonts remain available for use. With Deluxe Paint II you load one list of fonts upon request and the only way to access another set of fonts is to use an undocumented feature hidden in the Screen Format selector. If you change bit-planes and/or resolution in DPaint II you flush all buffers including your custom brush, undo, spare screen, and your list of fonts! You can load a list of fonts from one disk, use some styles, select your currently chosen screen format, and still load in a new list of fonts to keep adding to your painting. Just clicking OK without even changing anything about the size or colours of your screen is enough to flush the buffers (be sure you've saved any custom brush you want to use again, or it will be lost by doing this).

By the way, fonts do not use much CHIP RAM if you have available RAM expansion memory. Only the entry for the font attributes on a list is consumed, so you can keep lots of fonts in memory without interfering with other programs' CHIP RAM usage.

There is a feature in versions of the Operating System up to and including 1.2, which allows fonts, once used by any program, to remain in RAM without being deleted, and be available for fast access by any other active program without reloading from disk. If there is a need to use the RAM space they occupy, fonts which are not currently being used are deleted. So it doesn't really hurt to leave them behind on program exit, and it may be a user-friendly thing to do. Unfortunately, some people with memory monitors complain that such programs do not free-up all the memory they use on program exit. This is a bad interpretation of the true availability of the memory for any program's genuine needs, and it saves future font access time. Programmers should not necessarily cater for the "clean exit" crowd, because evidently these people have more free time in their lives to listen to their floppy disk whir while reloading data that could have harmlessly remained in memory. The advantages of making fast program exits to do something else, then re-running the program and finding all your fonts and font libraries still there outweigh the joys of seeing bigger numbers on a memory monitor. Pagesetter leaves the fonts behind, most other programs clean them out before exit.

The fonts themselves are a series of pictures, usually letters of an alphabet (which may be roman, greek, russian, hebrew, or formed of scientific symbols), punctuation, numerals, and other charcters. Each font comes in a single size, described by the height from the top to the bottom of the character space. The font may be fixed width, meaning each character gets the same number of units wide as every other. The units of width and height are the pixel, or Picture Element. The pixel on the Amiga may be one of four possible sizes: Low-res, Interlace, Med-res, or High-res. Some fonts are designed to look correct in

a specific resolution mode, and may have the attribute of TALLDOT or WIDEDOT in the dot-font file to assist programs looking for the best fonts to display in a particular resolution mode.

"Point" is the term used for the pixel dots. It is derived from the typographical term PICA point, or 1/72 of an inch. Modern dot-matrix printers using 24 pins produce 72 dots per inch, or pica points. The pixel is not fixed, however, and may be tall or wide, depending on the resolution mode currently selected. So points on the screen will not correspond to points on paper printouts.

Let us examine screen fonts to understand how we can achieve the best printouts. Then we can look at the alternative ways of getting hardcopy with satisfactory results.

Most Amiga DISK-fonts are proportionally spaced (PS). This means every character will be allocated that portion of space necessary to produce a correct looking image. The lower case i, the period (.), and some others take up less space because they require little. Capital letters, such as M and W get more as they are wider. These characters need to be designed this way when they are created. Some programs, like CLI and NEWCLI, ED, EMACS, SCRIBBLE!, TEXTCRAFT, and many more cannot accept PS fonts. There are ways to force them to use PS fonts, but you can get pretty bizarre results if you try it.

Fixed-width fonts are useful in programs which line up columns of characters and figures (like a spreadsheet). Many programs do not use any fonts, though you might ask what the heck is that on my screen then?. Programs interface to the user through terminals: an input terminal, an output terminal, and an error terminal. These are virtual terminals, or imaginary ideals, and are treated like files by the operating system. The system sends output to the screen as if it were storing a file on a screen-disk. It reads the keyboard as though it were loading a file in from a keyboard-disk. It can just as easily read a file in from RAM-disk and output it to the printer (or printer-disk). The program doesn't deal with fonts in this case, only the screen-disk translator of the operating system. The program has no recognition of the existence of fonts, although the programmer must take them into account to some extent. You can wedge in a program to intercept output to the screen and replace the characters with your own font set. SetFont does this, with occasionally troubling results. Output to the printer is intercepted by the printer ROM and it substitutes its own pictures for each character received.

The pictures of each screen character are stored on ROM or DISK as fonts, and the current location of the cursor is used as the starting point to draw in the picture of the character. The screen is mapped, with the top left corner of the screen being the usual starting point, and rows are the lines of dots across the width of the screen, while columns are the lines of dots from top to bottom of the screen. Counting rows and columns gives the location to begin drawing the character. This is called BIT MAPPED GRAPHICS. Each bit, or pixel dot is mapped to one unique location on the overall screen or window.

ROM-fonts and DISK-fonts are bitmaps. There is a picture somewhere used as the master which is copied to the position each time. Normally, font bitmaps are not compressed, or compacted, in any way, and may use a lot of memory to store the collections of pictures which make up a large font. The theoretical limit on the maximum size of a font is 16 megabytes, but more practically 5,000,000 bytes is the limit with existing font creation tools. This ultimate size would require a hard drive to store the font, and of course RAM expansion to load it in. I create fonts larger than can be used on a 512K Amiga, and problems can result with programs which do not cater for large fonts.

The Amiga uses the monitor as a viewing window into RAM memory, and the bitmapped graphic screen can be much larger than the video viewing area. Page make-up programs, and some paint programs use this method. You can only see the the part of the whole bitmap which appears on your monitor, although you can scroll around to see the hidden areas.

Your resolution mode will determine how many rows and columns of the bitmap will be visible at any instant. In high resolution you can see 640 columns of pixels in the normal viewing window. In interlaced mode you can see 400 rows of pixels. It uses more hardware resources to view 640 columns of pixels, which restricts the number of colours to a limit of 16. In low resolution you can get 32, or up to 4096 colours.

Desktop publishing (or page make-up) software usually selects the 640 pixel-wide mode to fit more information on the screen, and non-interlace to avoid the bothersome screen jitter. Most programs limit the amount of colours to 4 or 2, to make more memory available for the page displays. This is usually chosen because colour printers are not generally available, and mass reproduction is achieved by black and white lithography or xerography.

A 24 pin dot matrix printer produces 960 dots per 8 inch wide line of printout. If your page is not exactly 960 dots wide on screen, there will not be a one-to-one correspondence of printed dots to screen dots. Scaling has to be performed. If your bitmap is 320 dots wide then exactly 3 dots are printed out to represent each one dot. If your bitmap is 640 dots wide then you need to print out 1.5 dots on paper for every dot on the graphic bitmap. Printers cannot print half a dot, however. They can only print or not print a dot, so the program either prints out the image 640 dots wide as a 2/3rds wide image with a one-to-one correspondence, or it prints every other dot twice and the intermediate dots once. This fattens some columns out and not others. It can be minimal in effect or disastrous, depending on your degree of perfectionism.

Scaling is even more difficult to predict if your bitmap is an odd width size, say 723 pixels. You do not get WYSIWYG, and have to test print it to determine if your result will be acceptable for your needs.

Page make-up programs take this into account, and usually provide a page width that corresponds to 24 pin printer lines.

None of the bitmap can be successfully printed unless your printer supports a screen dumps mode. This brings us to printer drivers and preferences. The system dumps graphics to the selected printer port, either parallel or serial, as if it was saving to a disk. The printer driver reads your preferences and prints accordingly. So preferences must be adjusted to match your desired output.

Deluxe Paint II loads up your preferences file, but allows you to over-ride this at print time through a requester window. You may decide to print in grayscale even if the preferences setting is colour or B&W. Pagesetter on the other hand refuses to print if preferences are set to colour, even though my printer produces better blacks if I do!

The third screen in preferences determines if your bitmap is output sideways or normal horizontal. Again, scaling is performed to translate the number of dots in the bitmap to the number of dots in the printout for sideways printing, usually expanding the dots considerably. The threshold value determines if light coloured dots are ignored and skipped, printing as white, or whether they are printed dark, even as full black. You really need to experiment here to find you favourite, but PageSetter requires that the default page settings be 2 or 3.

The width and height of the bitmap printout are affected by the margin settings with some printers, but not at all for those which ignore such settings. Lines and characters per inch settings affect the scaling performed by the printer driver, in addition to any scaling done by the program producing the bitmap. It is best to set 6 lines per inch (lpi) and 10-pica for pitch. Let the program do the scaling itself, unless you need reduced-size miniature printouts, then let preferences do additional scaling through the printer-driver. Experimenting with a variety of programs and bitmaps is the best way to achieve predictable and consistent outputs.

Fixed-width fonts are fairly simple in principle. Each character is allocated a rectangle of space for the font artist to draw the character picture. Any space between characters must be left in by the artist. The program which displays the pictures may use destructive techniques to copy each character into position. This means that the invisible background colour may erase anything already drawn in the rectangular position the new character copy occupies. They may also be non-destructive, in that a character may overlap some previously-drawn picture or character without erasing the portion of the new character drawn with the transparent background colour.

Programs which do not use fonts usually produce destructive lines of text obliterating the area underneath their image in rectangular blocks. Programs designed to use fonts normally let you overlay text on top of previous images. Proportional width fonts include factors which allow non-destructive overlap of characters on each other, for special purposes. There are adjustable settings for each and every font character which determine how closely it fits to the preceeding chraracter and how closely the one that follows is be placed.

Kern is the typographer's term for the precise fitting of a character to the one on its left. There are certain character pairs which look odd or incorrect if they are spaced the same distance apart as other characters.

I must digress a moment before continuing with Amiga-specific typography to cover general computerized typography. For more than a decade there have been typesetting machines controlled by 8-bit technology with only some 16, 48, or 64 kilobytes of memory. In other words, these very expensive machines have had the equivalent of an Apple II, Radio Shack TRS-80, or Commodore-64 as the work-station's "brains". The major part of the expense has been the back-end, or the type fonts on wheels, drums, and film strips, and the positioning and exposure mechanisms. The computer controller is relatively simple and cheap. These devices produce leading, reverse-leading, kerning, discretionary hyphenation, auto-hyphenation, letter-spacing, justification, flush left, flush right, and other features. Twelve years ago I could have bought a desktop typesetting machine for a retail price of $2000, which could produce output far superior to any laser printer now selling at any price. So if I appear to be annoyed that Amiga programmers are not always providing the features I expect, even though the Amiga operating system provides handy tools with which to easily implement them, perhaps you'll forgive my impatience. These problems were solved in software long ago!

Kerning usually involves a look-up table of around 300 pairs of letter combinations. Each time the computer program detects one of these combinations it replaces the picture of two separate characters with a single picture of two combined characters. Amiga kerning involves a positive or negative number of points where the left edge is positioned relative to the cursor current location. This does not take into account any previous character, or even if there is one

there at all. If a letter with a kern value of 3 is on the left margin it is drawn 3 pixels off the left side of the screen, and only the part showing on the screen is drawn visibly. This is not very useful for most characters, and really is only essential for special foreign language symbols, and scientific or mathematical symbols which must be composed of parts joined together. The kern amount is adjustable for each character in a font, and only applies to PS fonts.

Kerning affects a character's left edge. The character width affects space from the left edge to the right edge, and determines how much space exists to contain the picture. Again, this only applies to PS fonts, and is individually set for each character. On the right-hand side of a character is an area known as space. This is not in any way related to the blank character you get if you press the keyboard spacebar. It is a valid character just like every other, except that all the pixels in the picture are drawn in the background colour. It has a defined width, and it has space, and may be included in a font. Character space is a determines where the cursor position is placed for the following character, and is factored in with other items such as kern.

So kern, width, and space are all combined to determine how a character fits inside a word relative to the characters on each side of it, each with their own individual kern, width, and space.

In Guttenberg's time, when setting type involved physical characters cast in metal, there was no such thing as reverse-leading. Two physical objects could not occupy the same space, so each line (or row as we call it) had to be a minimum distance from the previous and next line. Space between lines was added by inserting thin strips of malleable Lead. These additional points of separation between lines of text became known as points of leading, and were measured in pica points (72 per inch). With photo-typesetting and computerized video fonts came the possibility of some overlap between the bottom descenders of characters (like gjpqy) with the top of the next line, since they were no longer physical objects. Reverse-leading and leading permitted columns of type to be squashed together or pushed apart to fill a column precisely. This is often necessary when an amount of words do not fit in the allocated printout space. With the Amiga, points of leading are pixels and cannot be sub-divided into half points as you can in typography, although points are resolution-dependant and vary if interlace is on or not.

Amiga fonts are allocated a uniform number of rows, or height in pixels, for the letters to exist within. All letters in a font have the same vertical height, but the characters do not all need to be the same size in the font. Fonts are stored in their directory, and named by height size, so the newest creation always destroys the datafile of the previous font with the same name as a point size. It is possible to store more than one font in the same size if the fontname has an extension prefix, but many programs only expect one font per size, and may list all the font sizes with their prefixes, only loading the first occurrence they find with the size prefix requested. In other words, alternative choices may be available but totally inaccessible to your program.

Unless user over-ride of the height factor is possible, each text line begins at the next pixel down from where the previous one left off. If there was user control it might be called leading (pronounced LEDing), or line spacing.

Programs which allow the mixing of fonts on a line of text are rare, and there are three ways of determining the character postion: by the top-left corner of the font, by the bottom-left corner, or by the left side and the baseline. This opens up an area of confusion for programmers since there is no standard from Commodore, let alone the industry, so there is no way for artists to design fonts which can be used by programs which mix fonts. The baseline is a global factor, like the height, which is the same for all font characters.

The font need not be drawn on a baseline. For example, a font which provides superscript and subscript characters may have them drawn above or below the baseline. However, the baseline is the same distance in rows from the top for every character. An underline may pass right through the subscript characters instead of under them, as the baseline is used to determine where the underline should be placed. It is a line one point thick, the width of the character, and two pixels below the baseline. If the baseline is located directly under the font height when it is created the system crashes when software underlining is selected. It corrupts memory below the area the character pictures occupy.

The baseline is used as the point from where all capital letters ascend. Another typographer's term you may encounter is x-height, being the uniform height of non-ascending lower case letters. Ascenders are those parts of lower case letters which go above the x-height (like bdfhijklt). Incidentally, printers using pieces of reusable characters cast out of metal kept them in large cabinets with shelves of sliding-out trays. The letters we call capital letters were kept in the top tray, or case, and the one below held the smaller letters or lower-case. This is the origin of the terms still used for the large and small letters of the alphabet: UPPER CASE and lower case.

A form of Amiga DISK-fonts recently invented by Inter/Active Softworks of San

Francisco, California, are COLORFONTS. Their program Calligrapher is a font editor which allows you to create and modify standard Amiga DISK-fonts, and to control every aspect of every character in your fonts.

With Calligrapher they introduced a new type of Amiga DISK-font which allows 16 colours per font. These colourfonts have been designated a new IFF type by Commodore, and the code to activate them in all programs using DISK-fonts will be included in the proposed 1.3 version of the AmigaDOS. In the meantime new Amiga programs are including the code to activate colourfonts, and the first such program to arrive on the market was PRISM, a HAM paint program from Impulse. Calligrapher and other products from Inter/Active Softworks include a temporary patch program called COLORTEXT to allow use of colourfonts in all programs which feature both colour and disk-fonts. The Calligrapher is a low cost font editor selling very well and I expect a lot of public domain colour fonts, as well as many commercial colour fonts produced by fine artists to be available for the Amiga.

Page make-up programs which restrict the user to B&W do not permit the use of colourfonts, and attempts to access them result in ugly failure. Professional Page by Gold Disk (PageSetter), and Shakespeare by Infinity Software (Grand Slam Tennis, Gallileo) are two products being readied to perform colour page make-up allowing the use of colourfonts.

The ColorText patch is not needed by these new programs. ColorText is copyrighted, and may not be redistributed. At present it can only be obtained from Inter/Active Softworks products, and I have a licence to include it on my Lion's Amiga Art Studio products. There is a public domain version of ColourText which shows a preview of what you would see, eliminating the vowels AEIOU in the display, and this demo version is freely available through users groups and BBSs.

Other fonts worth mentioning are PFonts from Sparta, and Stroke Font from Aegis. The PFont is a polygon font structure describing a logo-like, or turtle-graphic type of font which can be scaled on screen, and may be stretched or squashed (as used in Aegis VideoTitler). A similar concept is included as objects on the Aegis Videoscape-3D disk, being separate characters in 3D. Stroke Font is used in the Aegis Draw CAD program and creates letters using one pixel wide strokes, scalable depending on your zoom view. Ultimately these are all dumped to printer as representations of the screen bitmap, and suffer all the scaling problems in hardcopy encountered by others. Draw however supports pen plotters which can correctly reproduce Stroke Font.

TEX is a device-independent font system which adapts to the particular limitations of the Amiga display. It is further independent in that it can be output to a number of devices and produce approximately similar results on plotter, printer, laser, or phototypesetter. If output to dot-matrix it again suffers every limitation of every other type of font in the scaling of pixels to printer dots.

PostScript is a page description language. It is widely used in desktop make-up programs on other computers. LaserPage (PageSetter), and City Desk for the Amiga produce files which can be sent directly by cable or modem to laser printers or photo-typesetting machines which support the PostScript language. PostScript is another language that is turtle-graphics-like in it's construction of each character, and is device independent. There is much debate as to whether PostScript is the best of many Page Description Languages, but it was adopted early on by Apple for the LaserWriter printer, and is very popular now. With PostScript you cannot truly preview what will be output, but you get an approximation on the screen bitmap. Special bitmap Amiga disk-fonts are used to fill in the lines of type with something which looks similar to the output type fonts the PostScript device produces. There are serious errors in how much width lines of type needs, and in how much vertical column space is filled by the final text printout.

Laser printers use a laser diode device to demagnetize the non-printing areas of a xerography drum. The printing is achieved like regular xerography, and the image detail is about 300 dots per inch. That is 300 dots wide by 300 dots tall, a total of 90,000 dots to print a 1 inch black square. This is about four times the resolution of a dot matrix, but only about 1/4 the resolution of the cheaper photo-typesetting machines. For those who are used to office typewriters and xerography machines this is a wonderful improvement. For typographers this is proof copy, unsuitable for public display.

Amiga owners with dot printers which print a dense black image can get laser quality by printing at four times the final image size and reducing the result at the local copy shop. As you reduce the image the jaggie stairstep dots are similarly reduced. A 25% reduction gives you a final image of 1/4 size. 72 dots per inch is now 288 dots per inch. The final output from a cheap xerography reduction is the same as that from the laser printer since they both use xerography to put the image on the paper. Low cost xerography copiers usually have a 64% minimum setting, and a reduction of a reduction ends up 42% of the orginal size. This should be good enough to impress anyone who finds a laser printout impressive. Laser printers are fast, quiet, and cheap per page, spread out over the life of the unit. Most Amiga users can only justify a

dot printer on the desktop however, and this is a good cheap alternative to the high cost of laser printing.

One other point should be mentioned: the stock laser fonts were never designed to be used in tiny text sizes. They were designed for specific purposes by master typographers hired by major institutions. Nobody ever hired or paid anyone to design any fonts specially to match the limitations of the laser printer which would be readable and easily comprehensible. There is a lot of disrespect for professional type designers, and few understood what is involved in the process. The typefont used in printing the Bell Yellow Pages took four years to design, and was not created for any other purpose or use. It was designed to match the size needed by the customer and survive the hazards of printing ink on thin sheets of paper with showthrough from the other side of the page. Certain aspects of the characters are deliberately exaggerated to make the words easier to read in cramped lines of type. Another case is Herman Zapf, a famed designer of some of the world's most used typefaces, who took seven years to complete the design of the Melior font. Here is a man who has created many fonts throughout his career who spent longer than the working life of the Apple LaserWriter to satisfy himself on all aspects of a single font!

Lion's Amiga Art Studio
PO Box 42252, San Francisco, California, 94142
(415) 863-1781 BBS; (415) 431-1799 Tech Support Phone

⁂

When Mike Hatt and Roy Thomas were having a look round the Commodore stand at the Novotel, they noticed what appeared to be a new piece of 8-bit kit - the only one at the show - a new version of the 1541C drive with a smaller case and a separate power supply. No, it didn't seem to be a 1581, it did look as if the slot would take 5.25" disks!

If this was introduced to slow down the march of the independents like Evesham, maybe it could be called a Decelerator...

⁂

CHAIRMANS CHATTER

by John Bickerstaff

11th Commodore Show

Since last issue, the main event in the ICPUG calendar was the June Commodore Show. It was a great success! All credit and thanks to our Exhibitions Organiser, Janet, and to all those members who gave up their free time and energy to provide an excellent service. The Seminars were such a success that we had to turn visitors away at the door! I would like to thank the seminar panel for participating, their advice was much appreciated.

Enigma Variation

Nuttall's says: a purposely obscure saying or question propounded for solution; a riddle; any puzzling or unaccountable phenomenon or proceeding. The Enigma story has concluded with the company has ceasing to trade. At a creditors meeting held on July 7, Adrian Richard Stanway FCA, of Cork Gully, was appointed Liquidator by the creditors. It was reported that there was no prospect of a dividend being paid to any class of creditor - this means that advance subscribers will not get any money back.

The company was initially financed by an overdraft of some £18,000, guaranteed by R K Rosen and S Zerman. The Editor, Julian Rosen, sole director and controlling shareholder, raised some further £8000. R K Rosen met various costs himself, in respect of which he is claiming £13,000. Mr Julian Rosen is now believed to be living in the USA under an assumed name. Why did Julian Rosen fail? I will not attempt to answer that.

Support for VIC20, C16, PLUS 4 and other machines

ICPUG is run by unpaid volunteers. Contributions to this independent magazine are freely submitted by members. The Editor includes as many contributions as possible and is willing to consider those concerning the machines listed above. Many of the Committee also write regularly and would be pleased to see more articles by other members. This is a challenge to you all. Grab a piece of paper and a pencil and draft your first article now. Refer to pages 304-7 of the May/June issue for guidance on forming and submitting articles.

Your money's worth

Separate categories of membership have been considered on several occasions. Unfortunately, additional administrative work and costs would make this impractical. We spend the major portion of the money subscribed by members on the production of the six issues of this magazine. It is through this vehicle that we advise members where to obtain discounts, free software and technical advice for all machines.

External non-Commodore drives

In the last issue I stated that only the Commodore A1010 3.5" disk drive would operate as a PC external drive when connected to an XT Bridge Board. There have been several responses to this. One, Chairman of the Solent group ,said that his non-Commodore drive worked perfectly. Another informed me of a conversion to the Bridge Board bringing it up to specification. This modification voids the warranty - you have been warned. However, the advice came from PSL so it should be good.

Locate chip LS175 on the Bridge Board and connect a 470 picafarad capacitor between pins 8 and 9. This modification adjusts the timing to the designed figure. It seems that both Board and external drive are manufactered slightly off the Commodore design specification. This is why third party products, manufactured to CBM specs, do not run satisfactorily. Unless you know otherwise?

Bulletin Boards

We are involved with three Bulletin Boards:

128 Board on 0902-745337. On-line 24 hours - see page 402 - 1987.
Y2 Board on 0923-228558. On-line 24 hours.
CIX ICPUG Conference Area on 01-399 5252. On-line 24 hours.

The CIX area will soon be set up under the moderatorship of our Technical Adviser, Tom Cranstoun. We will inform you when it is on line. Meanwhile, CIX has many other interesting conference areas.

Public Domain Software

ICPUG does not charge for any library software. It only costs you return postage to the relevant copier (you also provide suitable packaging). All our Librarians and Copiers give up their valuable time free of charge. Therefore, since you provide the media, the service is free.

Change of name and venue

The PCW Show is usually held each year at Olympia. Well it used to be, anyway. This year it is being renamed The PC Show and is being held at Earls Court. Rest assured, our Exhibitions Organiser has got this organised.

11TH COMMODORE SHOW -
NOVOTEL - 2ND TO 5TH JUNE 1988

by Janet Bickerstaff

Showtime

After weeks of planning, and wondering just where our stand would be, the Show began for us on Thursday, 2nd June. Database Exhibitions had broken the joyful news to us shortly before the Show that someone had not taken up their booking on stand 89 and it was ours. One of the best stands in the Show had gone to ICPUG!

Set-up went well and Jim Kennedy was only slightly delayed with the vanload of equipment. The band of volunteers puffed and blowed and trundled backwards and forwards with the trolleys and the stand took shape. Fortunately I had booked the Salon Medoc as our hospitality suite from 2pm onwards. Tea and coffee were supplied free of charge by the Novotel - as much as we wanted unless we drank the hotel dry. No-one had ever managed to do that.

John and I were putting Pete Miles up for the Show's duration, so when we got home there was a quick meal and back to the computers!

Friday was an exhausting day. Some of us were invited to Commodore's press conference and champagne breakfast. Steve Franklin and Christian Andersen of Commodore spoke of their intentions to boost the UK market this year. There was champagne and kedgeree for those who had time to eat it.

Then, a quick dash back to the stand and down to the Salon Bourg to organise the morning question and answer seminar. Commodore had not been able to put on their proposed graphics demonstration and it was up to ICPUG to fill the gap.

Our team of experts included Jim Butterfield and Betty Clay, Simon Tranmer, Tom Cranstoun and Harry Broomhall; about twelve in all. The morning session was busy, and visitors had to be turned away from the afternoon session as the fire officer had decreed one hundred chairs and no standing room!

For a short time your revered Chairman disappeared under a huge sombrero which had been specially brought back from Mexico for him by Mike Brown of Lan Computers. Mike dared John to wear it at the Show, and in return gave us an Amiga external drive for the ICPUG raffle.

The stand was very popular and always had a crowd around it. We had an Amiga and 128 connected to a laser printer. There was another Amiga and a colour plotter, and Compunet on an Amiga. We also had a C16, but not enough space to set it up.

At six o'clock that evening John, Jim Butterfield, Betty Clay, Tom Cranstoun, Peter Miles and I went to the Amiga Developers' meeting. There was a great deal of talking and more sandwiches and wine. Dr. Haleem and Tom Hart of Commodore went through the agenda of items for discussion and there was very lively debate as to the way forward. We retired to Da Gianbruno restaurant to build up our strength for the next day.

Saturday morning was really busy. Lots of younger Commodore devotees arrived, plus those who had travelled considerable distances to come to the Show. By four o'clock the crowds had thinned and for the first time we had time to look round ourselves. From the smiles on the faces of some exhibitors, business had been good and there was talk of driving through the night to bring in more stock for Sunday.

Meanwhile the team of ladies hostessing the Salon Medoc were doing a grand job. The weary volunteers from the front-line were revived with transfusions of tea and coffee and sent back to the stand for another tour of duty!

Twenty-two stand volunteers retreated to Da Gianbruno that night to fortify themselves for the last day of the campaign. Sunday morning saw one or two casualties among the troops. A tummy bug and sore throats had overcome them. Investigations later by Hammersmith Environmental Health Officer gave both Da Gianbruno and the Novotel air-conditioning a clean bill of health, so it was concluded that it was exhibition fever.

Sunday was another excellent day with big crowds. After lunch there was the usual scramble for bargains with mini-auctions at many of the stands. At four o'clock when the Show closed many visitors were making for the exits happily clutching their new acquisitions.

ICPUG had done extremely well with over 200 new members and even some renewals for 1989. A big thank you to all helpers - upstairs and downstairs!

We had been very happy to have Jim Butterfield with us again from Toronto and this time he was accompanied by Betty Clay from Arlington, Texas. We were delighted to have them join us for the Show. Some of the stand staff even disappeared to go on Jim's guided tour of Wapping High Street and the Prospect of Whitby on Sunday morning, but that's another story!

Our next show is the Personal Computer Show at Earl's Court from the 14th to 18th September, with set-up on Tuesday 13th September. We may have two stands, so lots of volunteers please! As usual we shall be in the area set aside for the British Association of Computer Clubs, which is in the middle section of the exhibition. Commodore have offered us counter space on their stand, and have also asked us if we will put on Question and Answer Seminars in the exhibition theatre. It looks like being a busy time again!

After that comes the Commodore Christmas Show at the Novotel from 18th to 20th November, with set-up on 17th November. Database Exhibitions are raising the entry price for all their shows, and tickets for the Commodore Show will cost £5 at the door. The price to ICPUG members will be £3.50, so be sure to use the Advance Ticket Order form sent with this magazine. The advance ticket price for non-members is £4 for adults and £2.50 for under 16s.

Hope to see you at the Shows, and please contact me if you would like to help on the stands. Its hard work but you meet lots of nice people, like you!

RAFFLE PRIZE WINNERS

3.5" External Drive	Lan Computers	P. Martindale	531108
Fontmaster 128	Bytes & Pieces	D.M. Devon	531134
Mini Office II	Database Software	C.W. Sara	514333
Commodore 128 Companion	Bitstream Pubs.	R. Webber	517855
Mouse Mat	Bitstream Pubs.	B.J. Drake	531196
Mouse Mat	Bitstream Pubs.	B. Hazelwood	531154
Intro to Basic - Tape		J. Vonhaartman	530853
Intro to Basic - Disk		S.L. Vincent	517984
Year's Subscription	ICPUG	G. Dales	531148
Logo 64		R. Wilson	513710

⁂

Cavendish Commodore Centre
Cavendish Commodore Centre
Cavendish Commodore Centre

We are able to supply:

- IBM Compatable PC's
- Dot-matrix Printers
- Plotters
- Computer Stationary
- Business Software
- Commodore PC10/20
- Leisure Software
- Tape streamers
- Hard Disks
- Commodore PC40/60
- Hard Cards
- 3.5"& 5.25" Disk Drives
- Commodore 128
- Monitors
- Laser Printers
- Modems
- Postscript Printers
- Desktop Publishing Systems
- Networking Systems
- Graphics Tablets
- Accountancy Systems
- Daisy Wheel printers
- Home Computers
- Fax Machines
- Photo Copiers
- Portable Computers
- Commodore 64
- Self-Teach Software

FLIGHT SIMULATORS !!!
FLIGHT SIMULATORS !!!
FLIGHT SIMULATORS !!!
FLIGHT SIMULATORS !!!
(for all models)

SPECIAL AMIGA A500 & A1084 MONITOR PRICES TO ICPUG MEMBERS

A500 + Dpaint

£339.95 Inc.VAT

A500 + Dpaint + 1084 Colour Monitor

£539.95 Inc.VAT

Cavendish carry enormous stocks of Commodore home and business computers, we are able to supply complete systems to fit almost any application. Please call and discuss your particular needs, let's see if we can provide the answer to all your problems!

Cavendish Commodore Centre
66, London Road,
LEICESTER LE2 0QD
Barclaycard & Access orders welcome.
Telephone Leicester (0533) 550993

We are able to meet tomorrows needs TODAY

HARDWARE REPAIRS

by Nick Holford

I recently obtained a 64K video RAM upgrade for my C-128D. The instructions urge great care when fitting it and although I was careful I failed to notice a solder drip which fell onto the circuit board. On completing the upgrade I went to test the machine, but instead of 64K of video RAM, I had a dead computer.

I tried to contact my local repairer (who shall for the moment remain nameless) but he was on holiday. I therefore took the machine to a so-called 'micro repair specialist' who lives in the same town as our chairman. After two weeks they pronounced the machine totally and utterly dead - a write off. I collected the remains and on Joe Griffin's advice took it along to my local bod, who had by now returned from holiday.

He opened the machine up, said "The VDC chip's the wrong way round", corrected it (I don't think I had moved that chip!) and tested the machine on a 40 column monitor - PERFECT.

Happy now, I rushed home and installed the machine. Alas, no 80 column screen. Back to Crawley, this time with my monitor. An hour's work failed to locate the fault so I left it. That evening my saviour had another look and found a single broken track.

The machine is now fully operational.

The moral is - Beware of a certain 'repair specialist'. (ICPUG have had other bad reports of this particular outfit.) Instead, follow my example; contact:

Derek Hoare
29 Shackleton Road
Tilgate
Crawley
W. Sussex
RH10 5DF

Tel (0293) 542823

He is VERY good and not at all expensive.

⁂

SUPER* CORNER

edited by Peter Hauke

I learn something new everyday! The more I find out about computers, the more I realise there is to learn. I read a manual once, twice, even three times and still there are gems waiting to be discovered! This applies to every piece of software I use. For instance, Paul Blair's program for printing dollar signs (see Superbase later) uses MID$. Apparently, the third parameter in MID$ is optional - I didn't know. I even learn from programs I am sent to debug. Next time round I hope to announce the release of Superlib. Yes, a library disk full of useful routines and goodies for general consumption by ICPUG members!

Remember the PC User Show? Simon Tranmer and John Barrs pitted their wits in a competition to demonstrate the power and flexibility of databases. The problem was not simple: a fictitious trade union official, knocked down by a bus, dies leaving notes for an application program in an envelope in his pocket, or so the story goes. Using only these notes Simon and John had to design a full application demonstrating the versatility of Superbase Professional. Not surprisingly they came joint first. Congratulations are in order!

Sometime ago, it was mentioned in this magazine that SBpro on the Amiga does not import dBase files. This is indeed true, admit Precision Software, and the reason is simple: they didn't anticipate such a need as dBase is not available on the Amiga (though SBpro PC versions can import dBase files). I don't know if the facility will be included on the next release so make sure you tell John Barrs at Precision if you need it.

I am happy to support all versions of Superbase and Superscript, whether they be Amiga or 8-bit versions. I don't pretend to be a hardware expert, so if you are having printer problems then you should contact Pete MacLaurin of Precision Software, or your local dealer, though if you do send in a hardware problem it will probably be published in Readers Write.

Superbase Professional

Time spent on SBpro (Superbase Professional) means more to write about. Whenever I invest in a new system, I test it with mailing lists. Financial applications remain on a trusty tried-and-tested system, currently my Superbase/C128/1570 combination. I was setting up a mailing list on an 8096 to handle over 2000 records when I bought an Amiga. Fortunately, I had only entered 500 records and since I don't have an easy way of transferring data from an 8096 to an Amiga, re-typing all the records from scratch was the logical solution (transferring from 8250 to 1541 via a Brainbox, using Big Blue Reader to convert it to MS/DOS 5.25", using an IBM to transfer it to 3.5" and then using DOS-2-DOS to convert it to AmigaDOS is not easy!).

Creating the record format was straightforward: Surname, Forename, Add1, Add2, TOWN, County, POSTCODE, Tel, Remarks, Send, Memb. The first eight fields need no introduction. Town and Postcode are upper case because they convert text input to upper case only. Anybody who spends a great deal of time working with mailing lists should have a set of postcode directories (available from, would you believe it, the Post Office). Official PO Post Towns should always appear in upper case. Counties should always appear with the first letter in upper case. Send holds either Y or N depending on whether a letter is to be sent. If Send holds N then Remarks details the reason for not sending. All the members of my Youth Club are on the list so Memb holds their membership number. This is not the most exciting file definition ever created, but a mailing list is not the most exciting computer application!

Entering records: select [Record/New]; start typing. Useful editing facilities are: Ctrl-X to clear a field; and Ctrl-U to undo any changes before moving from that field. Try Ctrl-W to delete a word, Ctrl-E to delete everything to the right of the cursor, and Ctrl-V to switch insert/overtype mode. There are several ways to save records. Left clicking outside the record format pops the <Save this record?> requester. Alternatively select [Record/Save] or press Right Amiga-S, both save the record without a requester popping up.

What about the function keys? Select [Set/Function Keys/Edit] and click on a function key. Altering a function key is simple, but remember that you must press Return to accept input and then click on OK. You cannot simply type in the input box and click on OK. Shift Cursor Left/Right moves you to the beginning or end respectively, quite useful for editing longer boxes. Right Amiga-X clears the box and Right Amiga-Q recalls the original input. Unfortunately, the Control key sequences as used to edit record fields or program lines or text in the editor, are not implemented in requesters. Clear the input box by clicking on Clear, and type the following command:

```
BLANK : ENTER : REQUEST "Save?","",1,A% : IF A%=1 THEN STORE
```

Pressing the designated Function key clears the record format and places the cursor in the first field. After entering a record, either press Return repeatedly to skip through all the fields until the cursor disappears; press the Escape key; or left click outside the record format. This continues executing the rest of the Function key string. A requester pops up and if you press Return the record is stored. If you press Escape the record is not stored. This is incredibly useful!

8-bit Superbase prompts you to save a record and then prompts again to enter another record. The following program in SBpro does the trick:

```
enterrec%=1

WHILE enterrec% = 1
  BLANK
  storerec% = 0 : editrec% = 1

  WHILE (storerec% = 0) AND (editrec% = 1)
    ENTER
    REQUEST "Save Record?","RETURN or ESCAPE",1,storerec%

    IF storerec% = 1 THEN
      STORE
    ELSE
      REQUEST "Edit Record?","RETURN or ESCAPE",1,editrec%
    END IF

  WEND

  REQUEST "Enter another?","RETURN or ESCAPE",1,enterrec%
WEND

BLANK : VIEW : END
```

Unfortunately, unlike the Function key routine, you need to cursor to the end of the record before exiting Enter. There does not appear to be an easy method of exiting Enter. Left clicking has no effect; neither does the Escape key.

In the past, SBpro SEEMED to lock up on me for no apparent reason. Clicking with either mouse button had no effect. Convinced I had crashed SBpro, I would re-boot. In fact I had been very silly! Follow my actions: expand the program window to full size; select [System/Version]. SBpro seems to go to sleep. Click on the front-to-back gadgets or reduce the size of the window. Underneath lies a requester window waiting for you to click on OK. No more lock-ups and no more re-boots, I trust! I'm fairly certain that this is the cause. The moral is: if SBpro appears to have locked-up, try resizing the windows.

I am impressed with SBpro. I am transferring all my database applications across to the Amiga, except those of a financial nature. No doubt these will be transferred in due course, but I want to explore SBpro further.

Super Tips

The question is: not whether it can be done using SBpro, but how can it be done? The man with all the answers is John Barrs at Precision Software. If you are stuck, then a phone call to John should solve the problem. He very kindly gave me some tips for inclusion in this column.

Appending to the end of a program is easy. Select [Program/ Command] and type LOAD "anyprog",APPEND and press Return. 'anyprog' is appended to the program in memory. How about copying a subroutine across? Load in the program, delete all the unnecessary lines and save it. Load in the second program and append the subroutine. Try this instead: load in the program and use Ctrl-D to delete all the lines you want to copy across; load in the second program and paste back all the lines by pressing Ctrl-U repeatedly.

8-bit Superbase allows you to access the last command executed with the back arrow key. SBpro also provides this feature. Suppose a program is failing at a particular point. Simply type KEY 10, " at the start of the offending line. Don't forget the quotes after the comma, and place an END statement at the start of the next line. When the program arrives at this line, the line is assigned to function key F10 and the program stops. Select [Set/Function Keys/Edit] to alter it. Pressing F10 executes the line. Now the command can be recalled with Right Amiga-A. Edit and execute it until it is correct. Add KEY 10, " to the start of the command and press Return. The corrected command is now assigned to Function key F10. Select [Program/Edit] and paste it to the appropriate place by pressing F10. This may sound tortuous but, believe me, it is easy and very useful. Perhaps it's the way I tell 'em!

Try this: set up a file with three fields: Keyfield, Value, and Total. Keyfield is a numeric index field with the following calculation set:

```
SER ("filename")+1000
```

Total is a read-only numeric field and Value is a simple numeric field. Assign the following to Function key F1

```
SELECT LAST:X%=total:BLANK:total=X%:ENTER:total=value+X%:VIEW:STORE
```

Press F1 and enter an amount into Value. Press Return and then F1 to enter another. Enter an amount in Value and press Return again. Watch Total. Notice that it keeps a running total of the Value fields within the file. This can be tailored for a cheque book balancing application. Think and it shall be done!

These are just the tips of the iceberg (no pun intended) and I hope to publish more in future Corners. If you have a few tips, then do send them in.

Superbase

Thanks to Paul Blair of Australia for sending me his very welcome Superpages. Paul needs no introduction as his articles have been featured many times. Much of the following is gleaned from recent contributions. I apologise for not publishing them sooner but time is, as always, a precious commodity.

Have you ever noticed that Superbase prints a space after every field or variable? This can be annoying. In fact, let's face it, it is annoying! Only from the programmer's point of view, however. The reason is simple. Many users of Superbase write lines such as OUTPUT ALL [field1][field2][field3]. Superbase automatically prints a space between each field to tidy the output. The unfortunate side effect is that Superbase prints spaces after everything - variables included. Solution: concatenate strings and format the output in PROG mode. If you are printing numbers then use STR$ to convert them first.

Did you know that Superbase can underline characters in 80 columns? I didn't! The following line demonstrates this:

```
DISPLAY @10,2 CHR$(2)+"hello"+CHR$(130): WAIT
```

I'll let Paul introduce the next piece of code. The floor is yours, Paul:

> For all the formatting power of Superbase, it's odd that the humble monetary symbol (dollar, pound, lira etc) is not included in any of the output format commands. Here is a short way to print amounts with a leading dollar sign. Simply change the first "$" sign in line 40 for Chad mumbles, Transylvanian thrups, or whatever your native currency requires.

```
10 ask "amount"a
20 g$=mid$(str$(int(a*100)),2)
30 if len(g$)<3then g$=right$("00"+g$,3)
40 display "$"+left$(g$,len(g$)-2)+"."+right$(g$,2)
```

Thanks very much, Paul. After receiving one of his Superpages, the following piece of code was developed late at night with matchsticks propping up my eyelids. The solution looks very elegant, but believe me, the road was full of potholes and I managed to hit a large number on the way.

The idea is quite simple. [d1] and [d2] are date fields. [d3] is a calendar field (similar to a result field, but working on dates). The earliest valid date of [d1] or [d2], ignoring 00JAN00, is placed in [d3]. If [d2] is earlier than [d1] then [d3] is set to [d2]. If [d1] is 00JAN00 and [d2] is a valid date then [d3] is set to [d2] and so on. Set up the file definition and try entering dates. Leave one of the date fields blank and see what happens. I discovered after much trial and error that a calculation field can only be 30 characters long, counting a field as two characters (see appendix A, Superbase 128 manual).

```
key Key      Len 4
d1  Date     Len 7
d2  Date     Len 7
d3  Calendar Len 7
             [d1] - ([d1]=0 or [d1]>[d2] and [d2]>0) * ([d2] - [d1])
```

There's a lot in that little piece of code - if code you call it! ORs and ANDs are carefully chosen. AND has a higher priority than OR and is calculated first. If an expression is true then the expression is set to -1, whereas if it is false it is set to 0. Add more brackets and this is what actually happens:

```
 [d3] = [d1] - ( [d1]=0 or ( [d1]>[d2] and [d2]>0 ) ) * ( [d2]-[d1] )
```

If [d1] is blank or 00JAN00 then this reduces to:

```
 [d3] =  0   - (  -1   or (-----irrelevant-------) ) * (    [d2]    )
   which is simply [d3] = - ( -1 * [d2] ), ie [d3]=[d2].
```

If [d1] is a valid date and [d2] is blank then it reduces to:

```
 [d3] = [d1] - (   0   or (   -1    and     0    ) ) * (     -[d1] )
   which is [d3] = [d1] - ( 0 or 0 ) * ( -[d1] ), ie [d3]=[d2].
```

If [d1] and [d2] are both valid then it reduces to:

```
 [d3] = [d1] - (   0   or ( [d1]>[d2] and   -1     ) ) * ( [d2]-[d1] )
   which is  [d3] = [d1] - ( [d1]>[d2] ) * ( [d2]-[d1] ).
```

If [d2] is the lower date then [d3] = [d1] - (-1) * ([d2]-[d1])
which reduces to [d3] = [d1] + [d2] -[d1], ie [d3]=[d2]

If [d1] is the lower date then [d3] = [d1] - (0) * ([d2]-[d1]).
which reduces to [d3]=[d1].

I don't expect anybody to grasp this concept the first time round, but it is certainly worth studying. The problem is essentially caused by the way Superbase handles dates. In an ideal world, a blank date field should not be included in any calculations, though this may be difficult to implement.

Super Labels

The following program was written to print labels. All the variables are stored in the statements at the end and these must be altered for different label set-ups. The program, though complex, is straightforward.

```
 100 gosub 1000:rem initialise variables
 200 for i=1to f
 210 perform "f$("+str$(i)+")=f"+right$(str$(i),1)+"$"
 220 next
 300 select f
 400 for j=1to l
 410   for i=1to f
 420     perform "f$="+f$(i)
 430     a$(i,j)=left$(f$,w)
 440   next
 450   select n:eof clear
 460 next
 500 for i=1to f
 510   for j=1to l
 520     c=1+(j-1)*(w+g):rem simply calculates the column offset
 530     print @c;a$(i,j);
 540   next
 550 next
 560 for i=1to sp:print @1,0:next
 600 eof wait:menu
 610 goto 400
1000 f1$="[name]":f2$="[add1]":f3$="[add2]":f4$="[town]":f5$="[code]"
1050 f=5:  rem   number of fields to be printed
1060 l=2:  rem   number of labels across
1070 w=34: rem   width of individual label
1080 g=5:  rem   gap between labels
1090 sp=3: rem   lines between labels
1100 return
```

Super Lib

I am compiling a library disk of Superscript and Superbase hints, tips and applications. Most of this will be for the C128 as there does not appear to be much interest in the 64 or 8000. If this is not the case then write in and let me know and I shall tailor the programs to the appropriate machines as well. I need more routines and programs, so please don't hesitate to send them in.

Supertree

Last time, I published a resume of Ezitree, a genealogical application program running on Superbase 64 or 128, gleaned from Rex Toomey's information leaflets. Unfortunately, without a 1571, I was unable to review the C128 version. That has now been rectified. Ezitree is very much as Rex described (see vol 10, no 3, page 291). The detailed instructions guide you through the package. Essential for genealogists who are not programmers, Ezitree is not the fastest application program but, considering the amount of cross-referencing, it does the job very well. I haven't had to use Superbase 64 for some time and I can understand why I upgraded several yawns (er years) ago.

There only seems to be one omission: Ezitree does not store an individual's sex. Rather than looking to its datafiles, Ezitree asks the user to enter the sex on the few occasions it needs it. Annoying, but not drastically so. Rex says that this was omitted originally and he is loathe to make changes that could create problems with upward compatibility. Ezitree worked first time with my dot matrix printer, printouts appearing as described. Overall I am impressed with Ezitree. Both C64 and C128 versions work well and I didn't encounter any bugs. The progams are unprotected (full marks to Rex) so if there are bugs, you can correct them yourself. I may well be climbing my own family tree soon!

	Ezitree 64			Ezitree 128		
Max Records	1000 approx.			2000 approx.		
Practical Max.	500 approx.			1000 approx.		
Max Marriages	5			5		
Max Children/Marriage	20			20		
No of Generations	Screen	Printers		Screen	Printers	
		80	130		80	130
Ancestors Chart:	4	4	5	5	4	5
Descendants Chart:	4	20	20	5	20	20

Prices: Ezitree 64 - $25.00, Ezitree 128 $35.00, V3.0 upgrade to V6.00 $5.00. Due to high Postage charges, requests to purchase Ezitree by mail should include an additional $3.00. Enquire at a bank or Post Office for means of sending money to Australia. I would be happy to send Rex's inquiry letter to anybody interested in Ezitree. SAE to me please. Ezitree may be obtained from the author by writing to (full details of the type of printer should be included):

Rex Toomey, PO Box 84, BEROWRA NSW 2081, Australia

Superscript

Here's a neat tip from another Precision expert - this time it's Pete MacLaurin. The defaults file includes lines of reversed-out asterisks followed by a letter or number, an equals sign, and a string of characters. These are macro command assignments, executed by pressing Run/Stop followed by a character. Did you know that these assignments can appear in any file? On a new line, type a reversed asterisk (Ctrl-L) followed by a=hello. Press F5 to view the document. The word hello is assigned to Run/Stop a. This has many potentially useful applications. For instance, instead of using F1 s c followed by a letter, you can enter commands in your document and view it (F1 p v) to assign them to the appropriate key. Instead of the rudimentary command line editor you can use the full power of Superscript to edit macros. Not bad? This is particularly useful while editing and testing command strings. Perhaps you can use text area 2 to hold your command strings whilst editing an article in text area 1?

That's not all. Do you know how to change screen colours? I didn't, as until recently I used a mono screen. Pages D-5 and M-32 of the Superscript manual describe the setting up of screen colour combinations. You can alter the settings in a text area and view the document to change the colours instantly. I have mine set to: *sc141,0,128,137,137,137. Armed with this information, type the following lines into a blank text area, remembering that the asterisk is really Ctrl-L and ^ is the up arrow key, underlining represents a space.

```
*a=^+qfa^w^w^d^d^e
*q=/ssfA^=which_are^m
*z=^w^e^n^w^n^w^n^m^&x
*x=/ab^j^m^m/am^&c
*c=^w_^h^d^w^w_^h^d^w^w_^d^z
```

Ensure that you are not in insert mode. Type 'All computers which are Commodore are...', press Home followed by Run/Stop a. The words 'which are' are removed. Press Run/Stop z to swap 'Commodore' and 'computers'. Pretty neat! Long-winded, but it works. This came about when Head Ed complained that he wanted to strip out 'which are' and swap the surrounding words. With his help, I developed the macros, convinced that Superscript could do it. There are neater ways but I shall leave those to someone else.

Control codes are explained on page R-11 of the Superscript manual. ^+q is undocumented, however. ^+ performs a gosub and q is the macro to be executed after which control returns to macro a. ^= clears the search string field (similar to F3) and the preceding A ensures that there is something in the search string to start with. ^& is a goto and x is the macro to go to..

Finally, another neat little Superscript feature which does not appear to be documented. One of the letters published in the Readers Write arrived without a name so several question marks were typed instead. Later, wanting to find the question marks, I searched for them and to my shock, horror and amazement, discovered that Superscript can do wild card searches. Try searching for t?e. This will find letter, the and tree among others.

Superletters

Terry Hart of 17 Burns Gardens, Lincoln LN2 4LJ writes: I am working on an applications program for Superbase and Superscript. It appears that you cannot have more than 20 markers in a merge document. The form I've designed to be filled from Superbase requires 89 markers!

- I set up a file in Superscript with 30 markers using F1 D M V, called them n1 to n30, and placed a checklist of markers at the start of the merge file. I set up a Superbase file with the same 30 fields. Using F1 D M M all 30 fields were merged. I also tried the command SELECT F:SUPERSCRIPT, "/PMV/QY" in Superbase and that worked. I found that if you try F1 P M V in Superscript then there are circumstances where the merge gives a 'Too Many Markers' error message. The Superscript manual states that you have defined more marker names than are in the merge list. Open to the floor!

Des Worsfold, 42 The Martlets, Rustington, Sussex BN16 2UD writes: Super Directory worked perfectly. I was hoping that it would convert PRG files, but each time I tried, the keyboard locked up. I want to transfer my Word Perfect files to Superscript but they are all PRG files. Is there a way to achieve this? Also, is there a way to rearrange the directory in Superscript, ie alphabetically?

- Transferring information between application packages is a major on-going debate in the computer world. There are many to transfer data - it is a case of finding the best. Write to Bavin Clarke (address inside front cover), who runs the Help Register and ask him to suggest a local member willing to help. One way to solve your problem is use SuperDiskDoc, or any disk editor, to change the PRG files to SEQ files. This may or may not work. Try it and see! There is no way to rearrange the directory in Superscript.

Giorgio Grassi of Bologna, Italy writes: I want to set up an accounts system whereby I enter a code and an amount into two fields. A third field is then set to the amount and if the code is from 0-49 then the amount is positive (credit), whereas if the code is from 50-99 then the amount is negative (debit).

- This really is only a variation of the dates problem discussed in the Superbase section. The file definition appears below:

```
key    Key     Length  4
code   Numeric +##
amount Numeric +####.##
reg    Result  +#####.##
               [amount]*([code]>49)-[amount]*([code]<50)
```

Super Stop Press

Just as I was putting the finishing touches to these words, Des Worsfold's disk came flying through the letterbox. On it he had placed some PRG files for conversion to SEQ files and below is a rudimentary conversion program. Unfortunately, it is not just a matter of converting the file from PRG to SEQ because Word Perfect seems to store the file in a peculiar manner. The program needs to be developed to cater for margins and to strip out multiple spaces. Perhaps a member in Mr Worsfold's area could contact him to help out?

```
100 open 1,8,1,"file.prg,p,r"
110 open 2,8,2,"file.seq,s,w"
120 for i=1 to 10:get#1,a$:next
140 get#1,a$
150 if st=64 then print#2:close2:close1:end
160 a=a+1:if a=40 then a=0:a$=a$+chr$(13)
170 print#2,a$;:print a$;
180 goto 140
```

Super Versions

Precision Software regularly release updated versions of their software. The list on the next page is reproduced with permission for members wishing to check whether they are using the most recent version. To upgrade to the latest version, contact Precision first for details.

Super End

And so, at last, we come to the end of this installment [phew - Ed]! My thanks go to all those who sent in letters or contributions, and a special thanks to those who sent in disks. I have not received any queries or comments from SBpro users yet but it is early days yet.

⁂

E-Script	64/4040	12FEB85	English +
E-Script	64/4040	20JUN85	Danish +
E-Script	64/8050	12FEB85	English +
E-Spell	64/4040		English +
E-Sp.Dict	64/4040	01OCT86	Dutch +
SFDTstDem	all/8050	01JUL86	English
SFDTstDem	all/8250	01JUL86	English
Sort Util	4040	1	English
S-Diskdoc	700/8250	07JUL86	English
S-Diskdoc	700/8250		English
S-Diskdoc	CBM/4040	17APR86	English
S-Diskdoc	CBM/8050	22APR86	English
S-Base	128/4040	2.08	English *
S-Base	128/4040	2.07	Italian
S-Base	128/4040	12NOV85	German
S-Base	128/4040	2.07	Dutch
S-Base	128/4040	2.07	Danish
S-Base	128/4040	2.07	Swi.Germ.
S-Base	128/4040	2.07	Swedish
S-Base	128/4040	2.07	French
S-Base	128/4040	2.07	Finnish
S-Base	128/4040	2.07	Swi.Fr.
S-Base	128/4040	2.07	Spanish
S-Base	128/4040	2.03	Span.Bin.
S-Base	128/4040	2.07	French
S-B.RelHD	128/4040	2.03	English
S-Base	128/4040	2.04	Norweg.
S-Base	128/8050	2.07	English
S-Base	128/8050	2.03	Dutch
S-Base	128/8050	2.07	Swedish
S-B.Util	64	2.07	English
S-Base	64/4040	2.03	English
S-Base	64/4040	2.02	French
S-Base	64/4040	2.03	Dutch
S-Base V1	64/4040	1.0t	Finnish #
S-Base V1	64/4040	1.01t1	Swedish #
S-Base	64/4040	2.02	Germ.Aus.
S-Base V1	64/4040	1.0t	Spanish #
S-Base	64/4040	2.02	Italian
S-Base V1	64/4040	1.0t	Norweg. #
S-Base	64/4040	2.04	Swedish
S-Base	64/4040	2.06	Danish
S-B.Start	64/4040	2.02	Swedish
S-B.Start	64/4040	2.02	Dutch
S-B.RelHD	64/4040	2.02	English
S-Base	64/8050	2.03	English
S-Base	64/8050	2.03	Dutch
S-Base	64/8050	2.02	German
S-Base V1	64/8050	1.0t	Spanish #
S-Base V1	700/4040	1.0s	English #
S-Base V1	700/8050	1.0t	English #
S-Base	700/8050	1.1t2	Swedish
S-Base V1	700/8050	1.0t	Fr.Can. #
S-Base	700/8050	2.06	English
S-Base	700/8250	04APR86	English
S-Base	8096/4040	2.02	English
S-Base	8096/8050	2.02	English
S-BaseV1	8096/8050	1.0t	Finnish #
S-BaseV1	8096/8050	1.0t	Fr.Canad #
S-BaseV1	8096/8050	1.0t	Fr.AZERTY #
S-BaseV1	PET/8050	1.0t	Dutch #
S-Off.V1	700/4040	1.0t	English
S-O.Dict	700/4040		English
S-O.Dict	700/4040		American
S-Off.V1	700/8050	1.0t	English
S-Off.	700/8050	2.02	German
S-Off.V1	8096/4040	1.0t	English
S-O.Dict	8096/4040		American
S-O.Dict	8096/4040		English
S-Off.V1	8096/8050	1.0t	English
S-Scr.I	CBM/4040		English
S-Scr.I	CBM/8050		English
S-Scr.I	PET/4040		Italian
S-Scr.I	PET/4040		Germ.DIN
S-Scr.I	PET/4040		Dutch
S-Scr.I	PET/8050		Dutch
S-Scr.I	PET/8050	29JUN83	Italian CB
S-Scr.I	PET/8050		Germ.ASCII
S-Scr.I	PET/8050		Germ.DIN
S-Scr.II	700/4040	07FEB84	English
S-Scr.II	700/4040		American
S-Scr.II	700/8050		English
S-Scr.II	700/8050		European
S-Scr.II	8096/4040		English
S-Scr.II	8096/4040		American
S-Scr.II	8096/8050	1.10	English
S-Scr.II	8096/8050	20DEC84	Dutch Lgl
S-S.Dict	4040	01OCT86	Dutch
S-Script	128/4040	11APR86	English
S-S.Dict	128/4040	06AUG85	English
S-Script	128/4040	17OCT85	Italian
S-S.Dict	128/4040	17OCT85	Italian
S-Script	128/4040	17OCT85	German
S-Script	128/4040	2.05	Dutch
S-Script	128/4040	17FEB86	Danish
S-Script	128/4040	15DEC85	Swi.Germ.
S-Script	128/4040	11APR86	French
S-Script	128/4040	11APR86	Swi.Fr.
S-Scr.HD	128/4040	15NOV85	English
S-Script	128/4040	17FEB86	Norweg.
S-Script	128/4040	10APR86	Swedish
S-Script	128/4040	2.06	Swi.Ital.
S-Script	128/4040	10APR86	Spanish
S-Script	128/8050		Norweg.
S-Script	128/8050	10APR86	English
S-Script	128/8050	02APR86	English
S-Scr.Dict	128/8050	19DEC85	English
S-Script	128/8050	28JAN86	Dutch
S-ScriptHD	128/8050	15NOV85	English
S-Script	64/4040	15NOV85	English
S-ScriptHD	64/4040	15NOV85	English
S-Script	64/4040	15NOV85	Dutch
S-Script	64/8050	15NOV85	English
S-Script	64/8050	15NOV85	Dutch
S-Scr.Dict	64128/4040		Dutch
S-Scr.Dict	64128/4040	16SEP86	Dutch
S-Scr.Dict	64128/8250	16SEP86	Dutch
S-Scr.Instl	PET/4040	1.0h	English
S-S/S-Spell	4040		English
S-S/Sp Instl	4040		English
S-S/S-Spell	8050		English
S-S/S-Spell	700/8050	30JUN86	English
S-S/S-Spell	PET/4040	1.0h	English
S-S/S-Spell	PET/8050	1.0h	English
S-Spell/4040			English
S-Spell/8050	09AUG83		English
Util S-Base	64/4040	2.07	English &

* This Is the same as 2.07 except for a very small change.

+ For Information only. Precision do not supply these programs.

# Should be upgraded to latest versions.

& Special utility for users with 64/1571 combination

***

Super P.S.

As of 15 August 1988, Precision Software will be operating an office in America. The address is:

Precision Inc.
8404 Sterling Street
Suite A
Irving
TEXAS 75063
UNITED STATES OF AMERICA

Tel: 214-929 4888

***

2031 HARDWARE BUG

by Joe Griffin

It is probably a bit late in the day to be reporting hardware bugs in a drive which has been out of production for several years, but having uncovered the problem, I thought that it should be recorded for posterity.

It is well known that the device number of Commodore drives, whether IEEE or Serial, can be changed through software. It can also be changed permanently by altering hardware links within the drive. The majority of IEEE drives can have device numbers in the range 8-15, while the Serial drives are limited 8-11.

When I first bought my PET system, I changed the 2031 to power up as device 9, so that my main drive (the 8250) could stay as device 8. Later I added a 4040 for club copying, and set that up as device 10.

Recently I wanted to add a C-128D to the system. For convenience (and to avoid breaking the warranty seal) I wanted to leave that as device 8, change the 8250 to 9, and the 2031 to device 11. That's when the fun started!

On the 2031, the device number is controlled by two diodes. You are told to disconnect diode CR17 for device 9, CR18 for 10 or both for 11. Next to CR17, which I'd already disconnected, is CR19. I couldn't find CR18 anywhere. Ever optimistic, I disconnected CR19. The drive was still device 9. Puzzled, I then connected CR17 up again and found that it was indeed now device 10.

After considerable experimentation I realised that I didn't have a clue what was going on, so I contacted the expert, Mick Bignall. He suggested one fix which didn't work, but, having studied the circuit, came up with a hardware fix involving a transistor and two resistors, in addition to the original diodes.

The problem is unique to 2031 drives. There is a shortage of lines, so two bus lines share those used for device number setting. When the drive powers up there is a momentary conflict between the bus and the device number. If and only if both CR17 and CR19 are disconnected, the bus wins and CR19 is ignored, hence device 9 is set instead of 11. By using a transistor to form a voltage splitter it is possible to force the drive to power up as device 11.

I doubt whether anyone else is stupid enough to want a 2031 as device 11, but I will be happy to supply a copy of the circuit on request.

Incidentally, Mick repairs drives and PETs. He doesn't touch Vics, 64s or 128s. If you have one of these machines which needs attention, I would recommend you contact Derek Hoare (see Nick Holford's saga elsewhere in this issue).

REVIEW - BASIC 8

by Charles Hooker

I recently came across the problems of using graphics in 80 columns on the C128. BASIC 8 is an enhancement to V7.0, adding a number of graphic commands - 53 in all - and permitting 3D views. It only operates in 80 column 128 mode, and requires a 1541, 1570, 1571 or 1581 disk drive. One point: I use 1541 drives with Dolphin DOS, which is fine as long as you take the RAM out before you attempt to load the program. If you forget, as I sometimes do, the drive just runs without picking up the program. BASIC 8 supports a joystick or 1351 mouse, and a number of printers including:-

Epson FX-80, Pansonic 1091, Star NX-10, Olivetti PR 2300, Star NX-10C, Mannesmann Tally Spirit 80, Gemini II, MPS 801/Seikosha/Gemini 10X and Canon PJ-1080A. (You can also write a printer driver program for your own printer if not included in the above. See the manual.)

My problem was producing graphics in 80 columns - this program does precisely that. 16K of graphic RAM in the 128 is insufficient for my needs. The manual states that you can replace the present 16K with a 4464 chip to increase the RAM to 32K. Two of these will give you 64K of graphic memory.

BASIC 8 comes on disk, and, when fired up, asks you which program (of five) you want to copy. There is a BASIC 8 Editor, Paint and Runtime on one side of the disk. This might seem very strange, but the disk is unprotected, and you cannot run the original disk as such. You may only copy from it.

So far, I have produced a number of quite startling effects. There is one remaining problem: I have been unable to get either Paint or Runtime to work properly. My RGB monitor has no horizontal or vertical hold controls so I cannot rectify the problem myself. The suppliers of BASIC 8, Financial Systems Software Ltd, Worcester, are currently working on the problem. In fact, they have supplied a SCART to RF lead in the hope that this might help.

There are three possible "MODES" in BASIC 8. You can only use "Mode 0" if you have an unenhanced 128. 128Ds have the increased 64K graphics RAM.

The accompanying manual is exceptionally well laid out and comprehensive, and is loose leaf - excellent!

On the reverse of the main disk are two programs which use BASIC 8. One is a workbench and the other a spreadsheet. Financial Systems operate a telephone service until 8.30 pm. Excellent service and good value at £34.95.

PET PRATTLE - 3

by Joe Griffin

The history of Commodore BASIC

In 1977 when Commodore developed their first ever microcomputer with an inbuilt BASIC interpreter, they negotiated with Microsoft and bought a version of the language, rather than merely licensing the rights to use it. As a result, over the years we have been tied to the frequently slated 'Commodore BASIC' rather than having the bells and whistles of more recent offerings. The big advantage of this fairly standard BASIC is the portability between different issues of the product. The first PETs came out with what has grown to known as BASIC 1.0 (or Original ROM BASIC). When CBM introduced the Upgrade ROM in 1979, there were substantial changes to the operating system but although the BASIC interpreter was also changed internally, including a number of bug fixes, the user interface hardly changed at all. BASIC 2.0 as it is called has only a single extra keyword. GO was introduced as a token in its own right, allowing the interpreter to recognise GO TO in addition to GOTO.

Programs which are pure BASIC 2.0, (no PEEK, POKE, SYS, USR or WAIT) will work without any modifications on any 8-bit Commodore machine.

Commodore BASIC has evolved along two separate lines. The PET/Business machine range has developed BASIC 4.0, though there are incompatabilities between the extended BASICs of the 8096 (LOS) and the 700 series. On the colour computers the BASIC has evolved from the same BASIC 2.0 origins in an upwardly compatible manner.

BASIC 2 & 4

BASIC 2.0 was standard on the 3000 series PETs and was later taken across to the Vic and C-64 machines. When Commodore introduced the 8032, knowing it was to be a business machine and that disks would be the norm, rather than the exception, they included disk commands as standard. The disk commands of BASIC 4.0 can, with one exception, be obtained by other means in BASIC 2.0, but the syntax is more cumbersome. Using BASIC 2.0 commands it is not possible to view the directory without destroying the current program. Most users therefore use a machine code wedge program which does allow non-destructive directory viewing. The BASIC 4.0 commands were in addition to the earlier commands and a pure BASIC 2.0 program will run on the BASIC 4.0 machines without changes.

LOS-96

In 1981 the 8096 appeared and in Germany SM Software developed an extended BASIC in the form of a Loadable Operating System. The product was known as LOS-96 and contained 17 additional commands and functions. These included ELSE, for IF ... THEN ... ELSE, and USING, for PRINT USING. Some 8096 machines were supplied with a copy of LOS-96, though there was very little documentation in evidence. I do not know the level of support provided with the copies of LOS-96 which were sold by SM Software. For the first time a degree of incompatability crept in, as LOS-96 stored its programs at $8000, in the additional memory, rather than in conventional memory at $0401. LOS could relocate programs, so moving up to LOS was simple but it was more difficult to transfer programs back to a standard PET.

BASIC 4+ on the 700

With the arrival of the 700 series, Commodore took across some, though not all, of the additional keywords from LOS and added others. Needless to say the new 700 keywords followed on directly from those of BASIC 4.0, with scant regard for those of LOS. Thus we see the LOS keyword DELETE becoming DCLEAR in BASIC 4+ when the same program is loaded onto the 700. However, the additional tokens are few in number and relatively specialised so conversion should not be too much trouble. As for LOS, BASIC on the 700 (and all future machines) was relocatable so upward transition is easy, backwards is harder.

Back to BASIC 2 - Vic and C-64

When the colour computers appeared, they were supplied with BASIC 2.0. Many rumours have been spread on the lines that the BASIC 2.0 chips 'just happened to be lying around'. More likely is that a conscious decision was made to use BASIC 2.0 for speed and ease, as it was thought that no-one would use a disk drive with such a hobby computer. Remember that at the time Commodore only produced dual drives and these cost about £600-800. Even though these machines lacked the disk commands, they adhered to the standard command set.

Plus 4 & C-16 BASIC 3.5

The arrival of the Plus 4 and C-16 in 1984 saw the first moves towards providing simple graphics commands on Commodore machines. A collection of 59 additional keywords was provided, which included some though not all of the BASIC 4.0 disk commands. Why the token values of all the disk commands were changed must remain a Commodore mystery but now we see a major incompatability. These machines will not accept the earlier BASIC 4.0 (perhaps thats why it is BASIC 3.5!).

BASIC 7.0 on the C-128

With the 128, the additional BASIC 4.0 disk commands were added, along with simple to use sprite and sound commands. This BASIC was upwardly compatible with the other colour machines, though not with the PET range.

40/80 Column Screens

One of the main differences between the BASIC 2.0 machines and most of those running BASIC 4.0 is the screen width. The majority of the 'business machines' have an 80 column screen. Very early in the life of the 8032, this was seen as a problem by many new owners, as a lot of their software would not run on the wider screen. Enter Chuan Chee! I know little about Mr Chee, except that he devised a very effective method of making an 8032 forget about half its screen. On the 8000, the screen is vectored. A machine language program intercepts the screen output and performs the appropriate formatting for 40 columns. In addition to publishing his routine in Compute!, he placed it into the public domain for the benefit of the rest of us. Some time ago, at work, we had one machine which would not run a stable screen with this program but a second version of the program was found and this appears to work on any vintage of 8000 machine. If anyone else has an 8000 machine which will not run an 80 to 40 converter, I can supply a copy which should be OK.

Unfortunately I do not know of a similar routine for the 700 series.

One use of the 40/80 conversion which I discovered a few years ago and reported in ICPUG-SE Newsletter is to allow twice the number of lines when editing in the original Superscript.

I was using Superscript to edit a Visicalc file, when I ran into limitations due to the fact that with an 80 column display, only 250 lines of text are available, whereas with 40 columns 500 lines can be used (Visicalc lines are very short and would not go beyond 40 columns). Could 40 column Superscript be used on an 8000 series PET?

I tried soft-loading BASIC 2.0 and BASIC 4.0 on the 8096, but in each case Superscript failed to work correctly.

I then re-configured the screen with "CBM 4032 C.CHEE" and loaded Superscript. GREAT - 80 column Superscript, folded in two.

Finally I tried loading the Fat-40 version of Superscript onto a reconfigured screen by typing dload "?5*" and this time it worked, I had 40 column Superscript down the centre of the screen.

The "CBM 4032 C.CHEE" program can be set to add gaps between lines and default to lower case, by changing two bytes only in the code. Printing chr$(14) has no effect once the screen has been re-configured.

In order to produce the lower case version of "CBM 4032" the following steps should be followed.

1) Load "CBM 4032 C.CHEE"
   or "CBM 4032 V2"

2) Enter the monitor.

3) Alter the line spacing from 7 screen rows/line to 9 :

```
.m 0478 0478
.: 0478 00 07 00 00 10 00 00 00
.: 0478 xx 09 xx xx xx xx xx xx
```

4) Alter the mode setting to jump to the lower-case set-up routine at $e07e, instead of the UPPER-CASE routine at $e086 :

```
.m 04c8 04c8
   04c8 10 a2 84 20 86 e0 60 20
.: 04c8 xx xx xx xx 7e xx xx xx
```

5) Resave from the monitor.

```
   .s "0:cbm 4032/lc",08,0401,07a8
or .s "0:cbm 4032/lc v2",08,0401,07a8
```

BASIC 2.0 on 8000 series

Owners of 8096 and 8296 machines can run any BASIC 2.0 program directly, by using the soft-load system provided with their machine. The program 'ADD-ON-LOAD' allows a binary image of other BASICs to be loaded into the expansion memory. A patch is applied to keyboard decoding routines and the video controller chip is re-initialised to suit the appropriate screen width required.

It should be noted that as supplied there is a bug in the ADD-ON-LOAD program (Heavens! Whatever next?). If the file specified cannot be found on the disk, no prompt is given for the user to re-enter the file name but any further typing is taken as input for the file name. It is impossible to use a null return to exit from the program. So unless the correct file name is known, the only way out is to reset the machine, using the switch at the back!

Next time I will discuss some of the packages which are (or were) available for the PET.

700 SCENE

by Joe Griffin

As I mentioned in my first PET Prattle, the 700 or B-series is well supported in the USA, thanks to the efforts of CBUG. The group contains a large number of hard and software wizards who have already finished the 8088 CP/M board project which Commodore started. Now they have moved on even further!

The serial bus, as used on the C-128, is now available on the 700. Both fast and slow modes have been implemented, giving access to cheap peripherals and the versatile 1571 which can read many disk formats, including MS-DOS.

Hardware is by Gary Anderson, who also does the 1 Megabyte expansions for the B. The driver software has been written by Dennis Jarvis and Jim Springer (Authors of the Abacus Book "BASIC 7.0 Internals").

Gary Anderson is at Anderson Communications Engineering, 2560 Glass Road NE, Grand Rapids, Iowa, 52402 USA.

CBUG membership is $21 surface, $35 airmail from CBUG Inc, c/o Norman Deltzke, 4102 N. Odell, Norridge, Illinois, 60634 USA. They now accept Visa and Access at a 5% surcharge, to cover their costs.

***

Commodore staff at the June Show said they had been told they were definitely supporting the C64 through Christmas 1988, so if the November Show comes off there may still be some 8-bit activity. However, there was some feeling that the June Show was at least the start of the wake for the good old 64... Let's hope that like Mark Twain, reports of its death have been greatly exaggerated!

There was also some talk on the CBM stand of some new developments in the CBM PC field. Details are expected soon (not Real Soon Now, we hope!) from the USA.

***

REVIEW - STAR LC-10C PRINTER

by James Hall

At the recent Commodore show I decided to take the plunge and purchase a printer for my C64. I obtained details of all the printers at the show, both dot matrix and daisywheel, and decided on the LC-10C for several reasons.

Firstly, I decided against a daisywheel. I felt that the marginally better letter quality output was not a significant advantage in comparison with the faster speeds offered by dot matrix printers. Since I envisaged that a large proportion of my printer output would be listing programs I decided that I would soon get tired of waiting for a daisywheel printer running at 12 characters per second.

Having selected a dot-matrix type I decided that the printer I purchased would have to be capable of high resolution screen dumps. This of course is another major advantage of dot matrix printers.

The printer would also be required to produce near letter quality output and so I decided that a good NLQ mode was also a necessity.

Finally, the printer had to be 64 compatible with no additional black boxes. This was an attempt to circumvent the problems which always seem`to occur when trying to get such arrangements to work satisfactorily.

The Star LC-10C met all the above criteria so I parted with £189 and left the show with an LC-10C under my arm. Included in the price was a copy of GEOS which I had been interested in trying out for some time.

The printer is 15 inches wide, 11 inches deep and 4 inches high, and weighs just over 10 pounds. It is supplied with a 13 amp plug and a cable for direct connection to the C64 serial bus.

As standard the printer has both a push feed tractor system and friction feed for single sheets. Single sheet feeding is simplified by a semi-automatic paper feeding system which works excellently. A cut sheet feeder is available as an extra for approximately £60.

An elegant feature of the printer is its paper parking system. This is used to park fanfold paper while single sheets are used and removes the need to take out continuous forms while using single sheets.

All of the facilities on the printer can be accessed via a touch sensitive keypad located on top towards the front. There are four buttons which allow you to select the required NLQ font, and the print pitch, manually feed the paper and set the printer on or off line. These buttons can also be pressed in combinations while off line or before power up to gain access to other features.

Setting up the printer is simplicity itself. The manual supplied is excellent and guides the owner through the sequence of straightforward operations necessary to get the printer working.

There is a bank of DIP switches under the front cover of the printer. These allow the following functions to be selected :

Auto line feed	on/off
Paper out detector	enabled/disabled
Device number	4/5
Paper length	11/12 inches
Operating mode	Commodore/ASCII
Commodore characters	Standard/DIN
Auto sheet feeder	Active/inactive

There are three further switches which allow the international character set to be selected. Ten such character sets are provided. The DIP switches are set at the factory to default settings which should suit the majority of users.

I connected the printer to my C64 and the mains supply and switched on. To my surprise it worked first time, listing a BASIC program perfectly.

The LC10-C has a wide variety of operational modes. There are five fonts each of which may be printed in any of four pitches. In addition each font may be printed proportionally spaced. Nearly all of these features can be selected from the buttons on the keypad, the only exception being condensed proportional which can only be selected by an escape sequence from the host computer.

Several types of text enhancement are available. Each font and size can be printed underlined, bold, italic, double width, double height, or quad width and height. Superscripts and subscripts are also available in each font and size. I have not tested all of these modes yet but the ones I have tried have yielded excellent results.

In addition to the character-oriented modes described above, the Star is also capable of printing 8-bit Epson graphics and 7-bit Commodore graphics. This means that high resolution screen dumps from GEOS and Mini Office II can be produced with no problems. While on the subject of GEOS, I discovered two methods of getting screen dumps onto the LC-10C from GEOS.

Firstly, I used the Commodore compatible printer driver with auto line-feed enabled on the printer. This gives passable results but, as the GEOS manual says, the dumps are printed at 60 dots per inch and so the right hand quarter of the GEOS image is lost.

I then used the MPS1200 driver with auto line-feed disabled on the printer. This produced a smaller image which contained the entire GEOS document.

I encountered no problems whatsoever in printing graphics from Mini Office II with the printer set up as a normal Commodore (auto line-feed enabled).

The final mode of operation is hex dump. With the printer set up in this mode it prints the character codes being set to it rather than the characters themselves. The data is presented in a neat table which looks very much like the memory dump screens seen on some monitor programs. This mode would be most useful in sorting out software/hardware compatibility problems.

In draft mode the printer achieves 120 characters per second at 10 characters per inch (manufacturer's data). The quality of this draft mode printing is more that adequate for listings or draft letters and the speed is most welcome in these circumstances.

Listings of Commodore BASIC programs are produced with the screen control codes appearing as text surrounded by brackets (eg. (DOWN) or (RIGHT)). This makes the codes easier to recognise but does make some of the program lines very long. I have found no way of disabling this feature.

Using Pocket Writer 2 I created a document to try out the various NLQ modes. I was truly surprised by the quality of the output. I have no qualms using the LC-10C to produce letters for business purposes (bank manager etc). By the way, Pocket Writer 2 is a wonderful word processor.

To sum up, the LC-10C represents enormous value for money. There are no compatability problems (as far as I can tell), the draft mode is legible and fast, and the NLQ modes produce output of exceptional quality. Add to this the flexibility of continuous or cut sheet stationery, the ease of changing from one type of stationery to the other using the paper parking facility and the number of available fonts and you are left with a printer that is hard to beat at the price.

***

AMIGA WATCH

by Mike Todd

Which brand of disk should I buy? This was often posed at the Commodore Show. Indeed, the last couple of Newsletters have had references to problems associated with buying cheap disks. I will try to explain the situation.

As far as the Amiga is concerned, never, I repeat never, use single sided disks. I know that the old 5.25" PET/C64 disks could be used quite satisfactorily in single sided varieties, but experience has shown that the Amiga is far more demanding of 3.5" disks. Even though there will be some that you can get away with using, the risk is just not worth it. You could be using disks containing valuable data for some time when, all of a sudden, up pops a read/ write error. This is worsened by the fact that the Amiga doesn't just write a single block at a time, but re-writes a complete track.

Next, let me dispel a couple of myths about some of the advertising hype about branded and unbranded disks.

Unbranded - this simply means that the disk itself bears no reference to the name of the manufacturer; sometimes there's not even a hint of the country of origin. These disks can be one of three varieties:

1 - from a well-established manufacturer, but without the company logo. These disks may not be of the same standard as the company's branded disks but have been properly checked, and are usually sold bulk packed (perhaps with the company's name on the box in which they came).

2 - from a well-established manufacturer, but without the company logo. This category of disks may have failed (possibly only just!) some quality check process and are offered cheaply as a result.

3 - from 'cheapo' manufacturers (perhaps in one of the less scrupulous Middle-Eastern countries). These disks are usually of dubious quality, although I have seen some which are surprisingly good.

The question arises, how do you tell which is which. The answer is that you can't unless you see the original packing case. Even then it's not always possible. Branded - now, what you mean by branded, what I mean by branded and what the advertisers mean as branded are all different.

An advertiser may call disks branded if any company name (perhaps just the distributor's) is written or stuck on the disk; you probably imagine a branded disk as one carrying a well known name. As far as I'm concerned, a branded disk is one with the maunfacturer's name printed on it.

There are many disk merchants who buy-in bulk quantities of unbranded disks and simply stick their own name somewhere on the disk. Since these people may chop and change their sources (which could be any of the three mentioned earlier), the reliability of the disks can change periodically. Since these disks are advertised as branded, you may be fooled into thinking that they are of a high quality when they may not be.

Strangely, even some of the very big names in the disk world work by buying in bulk from a manufacturer and putting their own name on the disks. As a result, it can all be very confusing, although the bigger the name, the bigger the reputation that can be damaged and the more likely they are to perform rigorous quality checks on bought-in disks.

So, which disks should you buy? It really depends on how much you want to pay for reliability. You could, for instance, go out and buy HD disks which are certified to double the density (to 2 Mb) and which are normally required for the IBM PS2, and some specialised musical keyboards. You will pay at least £4 each for these, and will be getting a superb disk, with a mirror-like finish and almost the ultimate in reliability.

On the other hand, you could buy unbranded disks for 75p each from an unknown source. In this case, you are unlikely to have a quality product, and you will almost certainly run into problems, if you haven't already done so.

For my own part, I now only buy manufacturer-branded disks or unbranded disks which have come from a proven manufacturer. I would not dream of buying disks which retail at less than £1.10 (discounted price).

There are several well known names to look out for - Kodak have recently appeared on the market, Dysan have been around for some time, Sony are well known, Verbatim, Maxell and 3M are also, and have been around for some time. Also, a very recent addition to the market is Rhone-Poulenc Systemes who produce RPS disks.

For my own part, I now use these RPS disks exclusively and have had no problems at all. They can be bought for around £1.30-£1.50 in boxes of ten.

In terms of unreliability, it is difficult to generalise from my own experience. I can therefore only pass on the factual details of which disks have caused me problems on more than a couple of occasions.

The worst I have encountered are unbranded disks I bought from a media supplier. Over a period of time, I have bought 400 of their unbranded disks; 12 simply wouldn't even format, over twenty failed at the first attempt to write data and another twenty or so occasionally give me read/write errors. That's not a good record and means several of my Fish disks are now unreadable.

Some other unbranded disks have also failed, but only after a year or so of occasional use.

Of the disks sent to me by members over the past few years, Gold Master disks did not seem as reliable as I would have expected, nor did Sentinel.

I have found that an examination of the surface of the magnetic material itself (preferably with a magnifying glass) can be very revealing. Some disks are covered in straight streaks across the surface; these are a result of the disks being initially manufactured on a single long, wide sheet of material, using a variety of rollers. In cases of light streaking, I have found no problems - heavy streaking does seem to result in long term failures.

The worst disks have occasional pits or localised blemishes on the surface. In nearly all cases, these disks have proved troublesome.

Finally, a highly polished surface is often a good sign. If nothing else, it means that there will be minimum friction between the disk and its case and, more importantly, between the disk and the read/write head.

One additional problem that has been suggested (by Jim Butterfield) is that some disks may have spurious magnetic fields on their surfaces which may prevent data being written cleanly to the disk. These may come either from the action of external magnetic fields, or from the test signals applied to the disk by the manufacturer.

Most manufacturers bulk erase their disks before packing. If you do have disks that are persistently unformattable, it may be worth bulk erasing these yourself. This needs to be done with a special alternating magnetic field, which gradually decays to nothing.

Audio professionals use such erasers regularly and I used to know many sources, but it appears that the domestic hi-fi market no longer demands such things. They are certainly available to the professional audio world (for instance, Wearite make them) but at a professional price. Don't use ordinary magnets to erase disks - this will not only reduce the quality immediately, but may even damage your disk drive by subjecting the head to a permanent magnetic field.

Jim also pointed out, and I agree whole-heartedly with him, that you need to be very careful how you store the disks as dust and hairs can still get onto the surface and cause problems. Smokers don't just risk their health and the health of others - they risk their data as well!

Finally, I would point out that the cases and the inner magnetic disk are often manufactured in different factories, in different countries or by different manufacturers and the fact that a disk is stamped 'made in Japan' may only be an indicator that the case was made there.

I would be pleased to hear of your disk experiences. My address is 27 Nursery Gardens, Welwyn Garden City, Herts, AL7 1SF - but please note that I can't handle individual queries.

Disk corruption

Apart from the niggles caused by inferior disks, as I've already mentioned at length, there is another trap which has caught me on several occasions - and one which I have only just identified.

I know the rules state that you should never take a disk out of an Amiga drive while the red light is on. Okay, but when I'm only reading a disk, I have often felt that it perhaps didn't matter since the worst I would get is a read error. I believed that in many cases the read was complete and the drive was simply in its short delay before turning off the light.

It now appears that the Amiga will sometimes write to a disk, even if you only asked it to read! It seems that the WorkBench likes to see these little .info files everywhere - not those which contain icon and other information, but the ones just called .info, and which appear to serve no useful purpose.

Say, for instance, you put a completely empty (but formatted) disk in one of the drives. Up comes the disk icon, on which you double click in the usual way and up comes an empty window. Now, examine the disk and you find that WorkBench has added the .info file - even though you thought it was only reading from the disk.

If, like me, you are tempted to pull the disk out during this process, then it could well be corrupted - unless of course the disk is write-protected, in which case the .info file cannot be written.

Apart from causing a few disk corruptions, this does raise the question of what the .info file is actually doing.

Examination of the file shows that it contains 4 long words of data, followed by a list (in ASCII) of the files/directories in the same directory (ignoring any associated filename.info files).

It is very like the list created by CliMate, which writes a .fastdir file to every directory it examines. In this case, it is designed to be a quick method of reading what's in the directory.

This makes me wonder if it's a hangover of some fast directory system intended to be implemented in WorkBench, but which never saw the light of day.

Word Perfect Revisited

In the last Newsletter I made a few comments about the flakey nature of Word Perfect. Since then, at least two new versions have been produced, and I had an opportunity to check out the latest (April '88) during the Commodore show.

All the crashes that I had seen in the very early version no longer happened, and a couple of bugs appear to have been cured.

There is little doubt that the latest version is a good, solid package and I am now considering buying it - or possibly waiting until version 5.This is supposed to have several improvements, including the ability to incorporate IFF images into the text.

Speaking with Betty Clay, it seems that Word Perfect have the end-user as one of their highest priorities and have set up a substantial toll-free telephone help-line in the USA. Little wonder that Word Perfect is now the world's leading word-processor for micro systems. There are some software houses that could take a leaf out of their book.

CRP Digitiser

Burocare (Kenton Rd, Harrow) are selling a very useful digitising tablet for the Amiga. It comes in A3 or A4 sizes, and I've had a chance to play with the A4 version. Manufactured by Cybernetical Research & Production (CRP for short), it is a means of inputting accurate xy co-ordinates to drawing/CAD software.

The base-board plugs into the serial port and, using some software supplied, all movements of the stylus on the board are transmitted to the Amiga, moving the pointer. The difference between this and the mouse is that the latter moves the pointer relative to where it was, whereas the former puts the pointer at the same absolute position on the screen as it is on the base-board.

For those wishing to write their own software to use the digitiser, the positioning data is very straightforward and is available via the serial port.

Using a special puck (with alignment cross hairs and 'mouse' buttons), it is very easy to transfer a complex drawing to a package such as Aegis Draw or Deluxe Paint. Just position the cross-hairs at the point, and click the button.

However, don't think that you can use the digitiser as a replacement for the mouse or as a general purpose graphics tablet, you can't. Feedback is just too slow through the serial port and trying to pick up menu options is frustrating.

At least the mouse still operates, so nothing is lost.

Resolution is good (down to 0.1mm) with an accuracy of +/- 0.5mm and the drawing surface is reported to be harmless to magnetic media.

This is not a graphics tablet in the accepted sense - it would be very difficult to draw pictures with any sense of freedom, simply because of the limitations of the data transfer rate. But as a digitiser, it is very good although expensive at £360+VAT for the A4 version, and £595+VAT for the A3.

Timesaver

Another useful, and rather cunning, device is Timesaver. This is produced by C Ltd., and sold by Cavendish Computers of Leicester.

I was on the lookout at the show for a real-time clock for my A1000. At one time, there were many to be had but, all of a sudden, the A1000 seems to have been left behind.

Shortly after the show, I visited Cavendish who sold me this little box called Timesaver which connects between the keyboard and the Amiga (and fits very neatly underneath the A1000, out of the way). The box has a processor in it which intercepts all keystrokes going to the amiga and will normally just pass them on. However, it can also generate keystrokes of its own. Apart from allowing several pre-stored key sequences to be generated (using the help key + one or more other keys), it will automatically generate the current date/time. this it will do either on pressing help+f5 or automatically during the CLI start-up by issuing the date command followed by the correctly formatted date derived from its own internal battery-backed clock.

Sadly, I discovered that it wouldn't work with my original A1000 keyboard. It seems that there have been some changes made to later keyboards, with which the unit works fine. So, having used the keyboard from my other Amiga (yes, I'm a two A1000 household) all was well - except that the EPROM was configured for German Amigas. This assumed a slightly different keymapping and the colon and semi-colons were replaced by <> symbols. This meant that some features (including the date!) wouldn't work unless I reset my keymap to d (German). This seems to be a problem in distribution, and hopefully it is only a matter of getting the correct eproms installed.

The unit costs just under £50, and I must say that I am impressed with the way it is implemented - it's just a shame that I can't use it yet.

SCA Virus revisited

Well, not so much the virus as the reference to the Swedish Crackers Association on page 249 of the last Newsletter.

Of course, it should have been the Swiss Crackers Association - I apologise unreservedly to the Swedes. I had Sweden on the brain.

New Graphics Chips

There has been some talk of the new and advanced graphics chips for the Amiga. These are supposed to have all sorts of additional features, not least of which is the ability to provide flicker-free high resolution.

This will be done by providing non-interlaced full vertical resolution which currently can only be achieved with interlaced mode.

There is a price for this option - the video signal will no longer be standard, and normal monitors and TVs will be unable to display the picture. Indeed, the higher line scan rate may even damage some monitors if applied for too long.

The only way round the problem is to use a multi-sync monitor. These are designed to take inputs of varying line/field rates and are about the only way to display the new video output. However, multi-sync monitors are not cheap.

The remnant pointer

I was interested in Pete Miles' comments about the 'double pointer' phenomenon (p 314 may/june '88). This also occurs with many other programs and I suspect that it is an Amiga Intuition bug which doesn't correctly clear the original pointer when a new pointer is set up.

More flakes!

I've written at length about the flakiness of Superbase Professional, and a very early version of Word Perfect.

One product that has escaped my attention, until now, is AmigaBASIC. although there are many aspects of this version of BASIC that I like, I find it particularly unreliable in some areas.

I have been writing a program to create Chinese horoscope charts, and AmigaBASIC seemed the ideal choice (possibly followed by compilation with something like AC-BASIC) and I have been shocked by some of the little bugs and irritations.

I don't intend to go into detail just at the moment, but be assured that I will be casting the critical Todd eye in this direction in the near future.

In the meantime, I see that there are a couple of other BASICs for the Amiga, and I hope to look at these at the same time.

***

SPREADSHEETS 2

by Brian Grainger

```
       K        L                        M        N       O

1   \a       {goto}a5~                Reset sheet for next period
2            {end}{down}
3            /rc{right}{right}~a5~
4            {right}{right}{right}{right}
5            {right}{right}{right}{right}
6            {right}{edit}*100+.5)/100
7            {bigleft}@int({calc}~
8            /rc~f5~
9            {left}{left}{left}
10           {edit}{calc}~
11           /rc~g5~
12           /rea6.e26~
13           /rff2~d6.e26~
14           /rcf6.j6~f7.f26~
15           {goto}a6~
16           {calc}
```

Last issue's article generated four responses. A query from H. Ellis: is there a Plus4 spreadsheet? If anyone knows, please inform me. Joe Griffin wrote to tell me that you can use Lotus with a mouse. Mouse Menu from Microsoft does the trick. Finally G Anderson made a contribution, more on that later.

At the end of the last article, we could calculate interest accrued on my account at the end of the interest bearing period. How do you reset the sheet ready for new period data? Have page 266 of the last issue handy.

Move the date in the last row to the starting date position on row 5. Create the new balance, which is the real balance to date in the last row, and store this result as the starting balance in row 5. Transfer the current interest rate to the position on row 5. Erase all the data from rows 6 onwards.

Although simple, it does raise a few interesting points. Assuming we are working from the keyboard, the first problem is to locate the last row. It could be anywhere in rows 5 to 26. It is easy to position the cursor on the cell at

A14 manually. However, we want to use a macro so the computer will locate the last row automatically. The technique is to position the cursor on A5 and move down until it finds the last row of data. Moving to A5 is easy. As the cursor may be anywhere, press the GOTO key (F5), enter A5 and press Return.

How do we jump to the last row? Analyse! provides a way, although the manual volunteers little help. Fortunately the Lotus manual is clearer. Press the END key (remember this is on a PC keyboard) and then <csr dn>. Where is the END key on the Amiga keyboard? ALT-<csr dn>. Press it, and an END prompt is displayed at the top of the screen. Then press <csr dn> and the next row preceding an empty cell in that direction is located. This is A14 in the example I set up last time. The END key can be used to move around in any direction on the spreadsheet. Simply follow it with the desired cursor direction. As well as finding the last in a block of full cells, when the cursor is located on a blank cell it will also find the first full cell.

Having reached the last row, transferring the date is simple. Use the RANGE-COPY facility. When using a macro we will not know the location of the last row, so we cannot use explicit cell references. However, we do know that the cursor will be positioned on the last row, so we can use the cursor keys to define the range. Using Analyse the transfer of the date can be carried out by:

```
/rc<csr rt><csr rt><return>a5<return>
```

(Use /c rather than /rc with Lotus)

Now to transfer 'real balance to date' from the last row. Bearing in mind that the cursor is now at A14, J14 can be reached by pressing <csr rt> nine times. We could use RANGE-COPY again. Stop and think. The value J14 displays is in fact calculated from a formula. If J14 is range-copied the formula may not be carried across. J14 needs to be placed in the value resulting from the formula. This is achieved by pressing the EDIT key (F2) followed by the CALC key (F9). However, as there are rounding errors in the arithmetic I would rather process the value to round it to the nearest penny. I do not therefore press CALC immediately but add the following to the formula. At the end key:

```
*100+.5)/100
```

This can be keyed immediately after pressing EDIT. Now move to the beginning of the formula and call up the integer function:

```
<SHIFT>-<csr lt>@int(
```

(With Lotus use <HOME> rather than <SHIFT>-<csr lt>)

Now press the CALC key. J14 is translated from a formula to a rounded value:

With Analyse `<F2>*100+.5)/100<SHIFT>-<csr lt>@int(<F9)<return>`
With Lotus `<F2>*100+.5)/100<HOME>@int(<F9><return>`

```
/rc<return>f5<return>
```

(With Lotus use /c instead of /rc)

This copies the calculated value to F5. Transferring the interest rate is very similar to transferring the balance. First <csr lt> three times to move from J14 to G14. Now press the EDIT and CALC keys and <return> to convert the formula into a value. Finally RANGE-COPY:

```
/rc<return>g5<return>
```

(With Lotus use /c instead of /rc)

We can now erase rows 6 onward to ready them for new data. I set up the format to row 26. It is therefore necessary to erase the rectangle defined by a6 (top left) and e26 (bottom right). Values to the right of column E are calculated, so they will automatically disappear. Use RANGE-ERASE to do this:

```
/rea6.e26<return>
```

Unlike Lotus, Analyse erases any formatting when you erase a range of cells. This means that we must reformat the block of cells d6-e26. Remembering that they were fixed format with two decimal places we have:

```
/rff2<return>d6.e26<return>
```

One small job left. New interest rates are entered directly to the sheet, overwriting the formula reference to the interest on the previous transaction. As some of the formulae are changed to values on the last row, it is necessary to set them up again. Assuming that at least one transaction entered on row 6 did not alter the interest rate, a simple RANGE-COPY will do the trick:

```
/rcf6.j6<return>f7.f26<return>
```

(With Lotus use /c instead of /rc)

Now, to tidy up. Move to A6 ready for the next input and press CALC (I usually set recalculation to manual to speed up data entry). This is done by:

```
<F5>a6~
<F9>
```

We need a routine to automate this procedure. This is the basis of a macro. I have set up the main sheet to fit on one screen and the macros on another. The simple way is to move right one screen by pressing <SHIFT>-<csr rt>, to bring column K onwards into view. When developing macros I use one column for labels, one for definitions and one or more for comments, useful when creating a lot of macros. find 30 characters adequate for the width of the definition column. Move the cursor to column L and type /wcs30. Leave the other columns the default width (9) so the screen displays columns K-O.

The first macro is to be labelled 'a'. You are allowed 26 macros with labels a-z and one with label '0'. This special macro is automatically run when the spreadsheet is loaded (more on that later). Move to K1 (<f5>k1<return>). This is where the label is to be placed. We want to type \a, where '\' signifies a label. However, if we simply type \a we will get a string of 'aaa's in the cell. If we wish to enter text, we must precede it with a single quote mark, thus:

```
'\a<return>
```

The single quote signifies that we wish to enter left-justified text. It can also be used to enter numerals as text. Without it, text would be entered as numeric data or a formula. The circumflex (^) is used to enter centered text and double quote (") to enter right-justified text. Examine the formula +f5-d6+e6. If the leading '+' was not included, the formula would be entered as text.

Move the cursor to L1 and start typing the macro sequence. Enter exactly what you would from the keyboard. The macro is executed left to right, and down the column. The macro completes execution on reaching an empty cell and awaits keyboard input. I stated earlier macros are entered as exact key sequences. How are the <F5> key and <SHIFT>-<csr lt> entered? By using macro keys as text enclosed in curly brackets '{}'. A full list is provided in the manuals so there is no need to repeat them here. However, Analyse! users should note that the description for {end} is incorrect. {end} is identical to the <ALT>-<csr dn> combination. Also note that the Return key is denoted by the tilde (~).

I hope you can equate the macro definition at the start of the article with the keyboard instructions. Lotus users have to use {home} instead of {bigleft} and do not require cell L13. '/rc' must be replaced by '/c' throughout. Having to repeat {right} nine times in cells L4-L6 is a trifle irritating. Lotus versions 2.0 and upwards allow a shortened form (explained in the manual).

M1-O1 is comment text.

Before the macro can be executed it must be named. To do this we use the label. As it is pure text it has no special significance. A range name needs to be created, and as the label is on the spreadsheet use RANGE-NAME-RIGHT. Move the cursor to K1. Then type:

```
/rnr<return>
```

This names the range 'a', and defines it as the cell to the right of the current position, in this case L1. RANGE-NAME-RIGHT is only available in Lotus versions 2.0 upwards. V1A users have to use RANGE-NAME-CREATE and define the names and ranges manually.

The macro has been created, so how is it executed? The MACRO key is pressed in conjunction with the letter, in this case 'a'. Where is the MACRO key? In Lotus it is the ALT key. On the Amiga it is the <RIGHT AMIGA> key (not as stated in the manual). The macro is executed no faster than writing the commands, but it is automatic.

G Anderson's loan analyser, which was translated from Micro Swift for the 64 to SwiftCalc for the 128, is small enough to reproduce here:

```
Enter Loan Amount   : £  100.00    B3:  (F2) 100
Term in Months      :        12    B4:  12
Annual % Rate       :     10.00    B5:  (F2) 10
Monthly Payment     : £    9.17    B6:  (F2) (B3*B5/100*(B4/12)+B3)/B4
--------------------------------
Total Interest      : £      10    B8:  +B3*B5/100*(B4/12)
Total Repayment     : £  110.00    B9:  (F2) +B3+B8
================================
Enter Month to view:          6    B11: 6
================================
Monthly Payment     : £    9.17    B13: (F2) +B6
Payments to Date    : £   55.00    B14: (F2) +B13*B11
Interest to Date    : £    5.00    B15: (F2) +B8/B4*B11
Balance Left        : £   55.00    B16: (F2) +B9-B14
```

Column A is set to width 22 and column B to 10. The cells are defined on the right. Enter the amount of the loan in B3, term of the loan in B4 and the APR in B5. The monthly payment appears in B6. To view the state of the loan for any month enter the month number in B11. Details will appear in B13-B16.

BITS, BYTES AND WORDS

by Brian Grainger

Hotel California, a network on a premium rate number, is now called Funtel and has some Micronet features including the multi-user game Shades. The number is still 0898-100 890; viewdata and scrolling software are supported. One way to try Micronet features without joining Prestel.

Prestel Users know that charges have risen. Those thinking of joining Prestel may like to take this into consideration. As well as raising service rates, they are charging 1p a minute. It is hard for the average computer user to justify the expense. I'm still there, but for how much longer I do not know.

Y2 Computing's bulletin board is now called Diamond Viewdata. ClubSpot on Prestel reports that Diamond has a mailbox system, chatline, and Amiga telesoftware for registered users. The number is 0923-228558.

Those with a Teletext TV can try interactive teletext on Televox Star operating on another premium rate telephone number, 0898-444 777, as follows:

Switch your TV to ITV and call up Oracle page 777.
Press the Time (or TP ON) button on your remote control and enter 3333.
Dial 0800 515 333 for the Demo service (the phone call is free).

You are asked to speak a few commands into the system so the computer at the other end can recognise you. After pressing the Time button, you are given another four digit number to type into your remote control. This is your own personal Teletext page for the duration of the call. The Televox welcome page is then displayed. Just follow the instructions.

It apparently uses menus and you move around by saying the numbers down the telephone. As well as displaying pages on Teletext, Televox can send voice data down the phone. Sound effects would also be possible for games. According to Micronet News, Televox Star offers ads, quizzes, games and information databases. Sounds like an interesting idea.

David Pirie highlighted a bug in version 2.10 of PC COMAL when a maths co-processor is used. "If a=0 then print a^2.1" produces a Bad Argument Error. The problem does not occur in the COMAL cartidge version.

H Smallwood (no Christian name included) has just bought a COMAL cartridge from Postronix (see last issue for details). His only regret is not buying it sooner. The additional programs and techniques that make Commodore BASIC bearable become superfluous in his opinion. I agree!

I have been given a COMAL demo disk for the 128 in CP/M mode, originating from Denmark and freely copyable. It does everything but save and list. I have arranged for a member of my regional group to act as a copier. Send a disk, return postage and the usual packaging to:

Cliff Butterworth, 17 Newtons Way, Hitchin, Herts SG4 9JR

Newer versions of the Amiga Workbench include a command called ASK, although little is known about it. It is used to prompt for YES or NO within a batch file. The following program demonstrates its use:

```
ask prompt
if not warn then
  echo no is the answer
else
  echo yes is the answer
endif
```

Andy Roddis has an Amiga query. Chapter 7 of 'Amiga Programming Guide' by Compute! mentions that recent Amigas are fitted with a new version of the graphics chip which has an additional colour mode, extra-halfbrite. This allows the Amiga to use 6 bit planes and display 64 colours on the screen simultaneously. Is there is a quick way of determining whether an Amiga has the old graphics chip or the new one. Can anyone help? Let me know.

There is precious little humour in the press these days so I am passing on some advice about computer viruses from Pastor Steve on Solely CBM.

The tip is the opening round in the 'Safe Software' campaign. Pastor Steve suggests that the more software promiscuous one is, the greater the risk of contracting the virus. Perhaps fidelity is the only answer.

Andy Waller's advice for those who cannot abstain: take precautions to avoid infection by keeping your protectors in place!

***

THE MEXICAN HAT(T) DANCE

Well we know, by our Chairman's neat bearing,
For our image he's constantly caring,
But he really had everyone staring,
When he put on a Mexican hat!

Now Jim B and Miz' Betty from Dallas
Said the ICPUG stand looked like a palace,
But we had to point out, without malice,
They had strayed in the shade of John's hat...

And the shade of that Mexican topper
Hid a 128D - I saw that -
Three Amigas, a printer, a plotter,
And a modem - all under that hat!

Richard Ahearn moved in as a boarder,
'Til John Bickerstaff shouted for order -
I shall have to eject this marauder,
'Cause he's plotting there under my hat!

Now the Editors doubtless are thinking
That it's risky to print things like that:
He'll send Alistair Kelman
To give us all hell, man,
And all for a rhyme on a hat?

(But I've written it now, so that's that)

So our efforts were duly rewarded
By new memberships, and we applauded
Our John B, who did more than was ordered:
'Cause he stepped out, like that,
And he told 'em, quite flat,
He'd do anything for us - yes, that:
Even wearing a Mexican hat!

The Mad Hatter (who else would dare...)

REVIEW - PROFESSIONAL PAGE

by Peter Hauke & Bill Bremner

Desktop publishing is publishing on your desk. Producing a small publication without a computer is not easy; a large one is a nightmare! The ICPUG Magazine is large. Small publications range from simple leaflets and price lists to two or three page newsletters. Newspapers are gigantic; glossy magazines are mega-productions with photographs and colour separation to boot!

DTP, as it is known in this acronymic computer world of ours (DP is reserved for Data Processing), has revolutionised publishing. The production of printed matter is a long and complicated process requiring the application of many skills and much talent. The central figure is the Editor (all bow to the Head Ed!), who usually commissions several authors to write for the publication; in the case of a book, a single author. Depending on the budget, the Editor may also employ photographers and artists, not forgetting advertisers, sub-editors, proof-readers, typesetters, printers, layout artists, graphic designers...

Pick up a magazine at home and look. Think of all the different people who have worked on it. Pick up a book. Look at a newspaper. Publishing is a very big game. And now we can play it on the Amiga! You don't even need a whole team of players; DTP has made the one-man-mag a real possibility. An individual can now write, edit and layout a whole publication.

Professional Page is a DTP package for the Amiga produced by Gold Disk Inc of America. It is aimed at the professional user, but priced so that anybody with the right configuration can afford it. More of that later. PPage comes on two floppy disks accompanied by a 200 page manual and 28 page supplement. Read the supplement first! You probably won't understand much of it, but the recommendation to pencil in the changes to the manual should be heeded. Rather than installing it on my hard drive, I simply copied both PPage system disks onto floppies and booted up the Amiga again. The manual, created using PPage and some well-known Amiga programs, is very well presented. It not only demonstrates the actual package but also covers many aspects of publishing. PPage is very easy to use, but then again, if you have run one Amiga program you have run them all! Gold Disk have exploited the Amiga environment to its full and it was a pleasure learning to use PPage.

The concept behind PPage is very simple. Boxes and pages! A document is made up of a series of pages. Pages are made up of boxes. Boxes hold text, pictures, drawings, whatever. The first concept to grasp with PPage is the page environment. This is well explained in the tutorial. However, many of you will not have the manual, let alone the program; so as an alternative, grab the front page of a newspaper. With a thick felt pen, draw a box around every picture, and a thick line around every article on the page. Then draw a vertical line between columns, and horizontal lines whenever the article changes column widths. By the end of this hands-on exercise, the page should be split up into a number of small rectangular boxes. I did this to a local newspaper and ended up with nineteen boxes from three articles and three adverts! From a headline, draw an arrow from the first box of an article to the middle of the next and so on until you reach the last box. Do this for each article.

This is how PPage works. First define a page. Then construct boxes on the page to create a grid. Link the boxes in an article, so that the second box is linked to the first, the third to the second, and so on. Import a text file from disk into memory and paste it into the first box. The text flows into all the linked boxes. Import a picture file into another box, and the front page begins to take shape. Once a page layout of boxes has been designed, it can be saved for future use as a template. A template can be likened to the designer's page layout grid. Once created it is simple to maintain a consistent design throughout a publication, and from one issue to the next. However, it appears that there is no page numbering facility. Mewonders how they managed to produce the page numbers in the manual!

Once you have grasped the concept of boxes, you can begin the PPage tutorial. This takes the form of a sample newsletter and is fully documented in the manual - very clearly so. Many of the requester windows have changed since the manual was written, but I don't think that anybody will have any trouble working out where they should click. It's all intuitive really!

However, I encountered problems when I loaded in the second page of the newsletter. None of the boxes could be moved or altered. In desperation I double-clicked on one of the boxes. The Active Box requester popped up displaying five icons at the top. I clicked on the first icon and immediately recognised it for what it was - an opened padlock. I clicked on OK and, you've guessed it, I could move that box around. A little mutter under my breath about inaccurate manuals and on I went. As it turns out, this is documented in the supplement - more fool me for not reading it first.

DTP packages can be very complicated. To become sufficiently productive, the user needs to grasp new concepts and learn many new skills. Not so with PPage! Anybody familiar with typesetting, page make-up and layout techniques, will find PPage a joy.

All too soon, the tutorial was over. It is a shame that a package as large and powerful as this should offer so little help. Less than a quarter of the manual and a couple of newsletter pages on disk are devoted to it. Woefully inadequate! I am told that a book of examples is being prepared. Hopefully this will accompany several disks demonstrating the real capabilities of PPage.

There follows what is effectively a layman's guide to design. You will be surprised at how much information is contained within these fifty pages. It's no encyclopedia, but it does provide a concise summary of design. The rules of thumb are very good and the beginner is well advised to follow them.

For instance, you shouldn't mix too many typefaces and sizes on one page, nor make your columns too wide for the size of type, nor use too small a typeface for reading text. The manual won't teach you how to design a professional product, but it will guide you. Of all the many books on the market which can guide you, my favourite is Design for Desktop Publishing by John Miles. This comes highly recommended to me (our Head Ed no less) and I am pleased to put my little weight behind it.

The menus and tools section is excellent with everything described in order of screen appearance. If you are perplexed by something on screen you can simply flick through the pages until you find the necessary reference. I used this method often and found it indispensible. The appendix is there for you to dissect at your own pleasure and is complemented by a well ordered index.

What facilities does PPage offer the professional typesetter? Powerful typesetting features are available through the type menu. As a PostScript-compatible package, PPage includes the standard range of PostScript fonts. WYSIWYG is given a new lease of life as your text is well represented on screen in all sizes and typestyles, so enhanced that you won't need to print out quite so often. A welcome feature is the true representation of dingbats (a collection of shapes such as scissors, arrows etc) on screen although no character list is provided in the manual. In low magnification text is 'greeked'. Lines of text are replaced by jagged lines to provide an overall view of the page layout, highlighting widows, orphans and unsightly white space. PPage offers kerning, tracking, leading (line spacing), baseline control, hyphenation, justification, tabulation and paragraph indentation. These are standard DTP facilities and justify Gold Disk's claim that PPage is a professional package. These topics are, as a matter of interest, covered in the article in the magazine on Font Facts.

All these typesetting features can be included in text files, such as Word Perfect, by embedding special codes within the text. PPage picks up these codes altering the text layout accordingly. Although PPage does not have a paragraph tagging facility (as in Ventura) you can simulate it within your wordprocessor. All you need do is type at the beginning of a paragraph the code <MAIN HEADING>, <BODY TEXT> etc and then do a search and replace before exporting the text into PPage, replacing all the simulated tags with appropriate codes.

For the layout artist PPage offers drawing tools enabling you to produce bar charts, simple diagrams and page layout enhancements. Simple to use, but complicated drawings should still be done in a dedicated drawing package. When compared to other packages, PPage is not lacking in features, though in some areas the adopted approach may not have been the most appropriate.

I particularly wanted to produce reversed-out text (white letters on a black background). I had almost worked it out for myself when Ken Edwards of Tri-Computer Software showed me. Setting the Draw/Fill Pattern to black, click on the Box Drawing Tool and draw a rectangle. Then click on the Box Create Tool and cover the rectangle with a box. Set Color/Ink Color to white (I know how to spell colour - PPage does not!) and click on the Text Edit Tool. Position the edit cursor in the box and start typing. Text will not be visible at first but as soon as you click outside the box white text appears on a black background.

I said earlier that PPage is very easy to use. What particular features make it easy? When you are working in high magnification (pages can be viewed from 25 to 200% normal size), the window scroll box allows you to move around the page quickly and easily. In the PPage box and page environment, there is always an Active Box. On occasions, you may lose track of it, or even forget which one is active. PPage locates it by flashing its outline and shifting the display as necessary. Several boxes can be defined as a group and manipulated as one object. Individual boxes, or groups of boxes, can be tacked to the 'art board' and copied over to other pages. The 'art board' is useful as a temporary storage area for text, picture and drawing boxes. Pages are made up by picking up boxes from the 'art board' and laying them down in position. Boxes can be held on the 'art board' until the appropriate page is made-up.

Numerous keyboard shortcuts have been implemented in PPage to speed up user operation. Despite the fact that these shortcuts are assigned to keys in a logical manner, they still have to be learnt. They appear alongside the menus, as is usual with good Amiga software.

The text editor is up to (or down to if you prefer) the standard of other DTP editors. However, the Search and Replace facility is useful. Despite creating text in a wordprocessor, I usually proof-read the DTP output. Having found an error or an item to be edited, I would scroll through the pages manually until I found the error. Find, Search and Replace replaces all that.

My Amiga is connected to a Canon dot matrix printer (unfortunately I do not own a laser printer). As PPage supports them, I printed out the tutorial newsletter on it. You would certainly not want to use the printouts as originals, although they are very useful as sample layouts. I envisage many users buying PPage to prepare proofs on their existing hardwarer. Once the final proofing is completed, a PostScript disk file can be taken to a typesetting bureau to produce camera-ready artwork on a laser printer (though anybody with these facilities will do). DOS-2-DOS can convert PPage PostScript files from Amiga format to MS/DOS format. Most bureaus can also supply quality typeset output, but won't normally accept disks in Amiga format. DOS-2-DOS can also be used to transfer ASCII text files in MS/DOS format to the Amiga.

PPage offers true four-colour separation enabling you, for instance, to produce camera-ready artwork for a glossy magazine. Four colour printing involves four separate print runs, one each for Yellow, Cyan, Magenta and Black. When combined in the correct proportions, the four can produce any colour. Before the days of computerisation, printers would use expensive equipment to mechanically separate a colour photograph into four negatives, one for each colour. This is no longer necessary. A digitized photograph can be included in your document. PPage will then produce four separate originals. This is a feature unique to Professional Page and deserves an article on its own.

PPage is targetted at the professional user. It is a memory hungry package which really needs a hard disk, expanded memory, and a PostScript laser printer. I reviewed it on a twin floppy system and although slow (coffee consumption back up to the days of C64 programming!), it is bearable.

I am very impressed with PPage. I must mention though that I have not yet used it to create a significant piece of work. One day, I am sure we will be producing the this magazine with PPage. If you have been thinking of DTP, then consider PPage. If you need four colour separation then buy it. If you want the lowest cost professional DTP package on the market then look no further.

Professional Page is available from Tri Computer Software Ltd, 161-169 Uxbridge Road, London W13 9AU, Tel: 01-840 6136 for £216.52 plus VAT which includes free support. They are happy to demonstrate it to you in their showroom. They also supply DOS-2-DOS which sells at £34.74 plus VAT.

KERNAL CALLS - 2

by Ian Cassidy

This time we look at two routines that accept characters from the keyboard. First, SCNKEY, a simple little routine that scans the keyboard every fiftieth of a second, and transfers the value of any key pressed into the keyboard buffer.

```
SCNKEY                     Scan keyboard and return ASCII value
CALL ADDRESS               $FF9F (65439)
COMMUNICATING REGISTERS    None
REGISTERS AFFECTED         A,X,Y
```

Second, GETIN. This routine gets one character from the keyboard buffer and places it in the accumulator. If no character is found then a zero value is returned.

```
GETIN                      Get a character from the keyboard buffer
CALL ADDRESS               $FFE4 (65508)
COMMUNICATING REGISTERS    A
REGISTERS AFFECTED         A,X,Y
```

GETIN performs the same function as GET A$, or GETKEY A$ in BASIC.

```
$0C00 JSR  $FF9F      ;Call SCNKEY
$0C03 JSR  $FFE4      ;Call GETIN
$0C06 BEQ  $0C00      ;No key pressed yet ? then try again
$0C09 RTS             ;Return from subroutine
```

This routine looks for the sequence of characters (C B M) to be entered at the keyboard. The RTS will reached only when the characters have been entered in the correct order, and only the correct characters will be printed on the blank screen.

For those feeling ambitious, here is a little exercise. Use PLOT and CHROUT to display a menu with three options. Then use GETIN and CHROUT to print a different message for each option selected.

```
$0C00 PHA             ;Store accumulator on stack
$0C01 TXA             ;Transfer X register to accumulator
$0C02 PHA             ;Store accumulator on stack
$0C03 TYA             ;Transfer Y register to accumulator
$0C04 PHA             ;Store accumulator on stack
$0C05 LDA # $93       ;Get ASCII code for CHR$(147)
$0C07 JSR   $FFD2     ;Call CHROUT
$0C0A JSR   $FF9F     ;Call SCNKEY
$0C0D JSR   $FFE4     ;Call GETIN
$0C10 BEQ   $0C0D     ;No key pressed yet ? then try again
$0C12 CMP # $43       ;Is the character a 'C'
$0C14 BNE # $0C0D     ;No ? then try again
$0C16 JSR   $FFD2     ;Call CHROUT)
$0C19 JSR   $FFE4     ;Call GETIN
$0C1C BEQ   $0C16     ;No key pressed yet ? then try again
$0C1E CMP # $42       ;Is the character a 'B'
$0C20 BNE   $0C19     ;No ? then try again
$0C22 JSR   $FFD2     ;Call CHROUT
$0C25 JSR   $FFE4     ;Call GETIN
$0C28 BEQ   $0C25     ;No key pressed yet ? then try again
$0C2A CMP # $4D       ;Is th character a 'M'
$0C2C BNE   $0C25     ;No ? then try again
$0C2E JSR   $FFD2     ;Call CHROUT
$0C31 PLA             ;Retrieve accumulator from stack
$0C32 TAY             ;Transfer to Y register
$0C33 PLA             ;Retrieve accumulator from stack
$0C34 TAX             ;Transfer into X register
$0C35 PLA             ;Retrieve accumulator from stack
$0C36 RTS             ;Return from subroutine
```

***

Joe Griffin was shedding the odd tear over the total absence of any form of PET at the Novotel - After all, this all started as the PET Show! There's some thought among several of the helpers that if we ever get another big stand and enough power points, we should try to arrange for a display of past as well as present CBM machines. At this rate Joe will find his PET scheduled as an Ancient Monument...!

***

TEXAS TALES

by Betty Clay

When I was writing this column for the last issue, the thought of visiting England was just a favourite, but far away, dream. It is true that it had begun to look possible, but no real plans had been made. For thirty-four years, I had never gone on vacation without my husband's company, but his health would not permit such a trip. After much discussion, we decided that I should come anyway, and now my trip is a delightful memory. A fortnight was too short a time to see much of your beautiful country, but it was long enough to become acquainted with some of you. Your warm, friendly welcome was wonderful. Thank you.

This month, I would like to discuss some system software bugs that have been causing excitement here lately.

INTUITION bug

Most of the bar clock programs on the library disks have a pop-to-front feature. Many other programs do, too. For quite a long time, I felt that I simply had to have the RSLCLOCK running on my machine. More recently, I have wanted to use Matt Dillon's DMOUSE, which has several pop-to-front features.

Have you tried some of these programs? While using them, have you experienced unusual gurus or lockups? It was Jim Butterfield who first suggested that RSLCLOCK might be a problem. I kept complaining about the crashes that were preventing me from really enjoying the Amiga. Jim suggested that I remove all public domain programs from regular use, and add them back very slowly - one each three or four days - until I could eliminate the one that was causing the crashes. I learned that RSLCLOCK was the problem, and that it only caused trouble on rare occasions, but the reason was not apparent to me at that time.

When DMOUSE was released, I liked it very much. It provides most of the utilities that I want, and Matt Dillon writes extremely good code. Very soon, however, I began to experience odd crashes. Lockups were more common than gurus. This time, I studied them carefully. The crashes seem to occur when something is popping to the front at the same time an icon or window is being manipulated. In DMOUSE, the pop-to-front feature can be turned off, so I can still use it. This is not always true of other public domain utilities.

Within the past two or three weeks, this problem has been discussed thoroughly on Usenet. A member of the Commodore Support team reported to Usenet that they are aware of this pop-to-front bug in Intuition, and that they are working to fix it. That fix, however, will not appear until 1.4 is released. In the meantime, you can avoid some unhappiness by removing pop-to-front utilities from your machine, or else by making sure that you do not try to do anything requiring the mouse at the exact time things are popping.

There might be one other solution to this. It appears that the priority assigned to these programs can affect their compatibility with other software. I am currently experimenting with TASKX (which lets you adjust the priority of programs at any time) to see if it provides a workable solution. While not really tested, it seems that adding even a single digit to the priority of DMOUSE may be adequate to prevent the lockups.

Disk problems

At least two known bugs are causing difficulties with our Amiga disks. Each is terribly trying. The first causes the Amiga to crash when we give it an unreadable disk; the other, the Delay(0) bug, can force otherwise reliable software to make a disk unreadable. In addition to these bugs, there are several conditions that cause disk problems, but that are not bug-related.

The most common disk problem is not caused by a bug, but by taking the disk out of the drive before the writing has been completed. Since the light goes out and then turns on again in many cases, this cannot be blamed entirely on the user. But it is the user who suffers the problems, all the same.

Another kind of read error can be caused by the very nature of the Amiga file system. On most computers, each sector on a disk is treated separately and bad disk sectors can simply be mapped out at format time and never used. This cannot be done by the Amiga system because it reads an entire track at a time. If any block on the track is unreadable, the entire track is lost. This is further complicated because, when writing back to the disk, writing begins wherever the head happens to be once it reaches the desired track. It is entirely possible for the sectors to be in a different place on the track each time the track is rewritten. A sector that appeared good on the first write can be written to a bad spot on subsequent writes. Some are suggesting that bad tracks be mapped out during the format process. The loss of some storage space is far less costly than the loss of important data. No cure for this problem is currently in sight, so our best hope to avoid these errors is to purchase good quality diskettes.

The third problem that can cause your disk to be damaged is called the

Delay(0) Bug. This bug was discovered perhaps as much as a year ago, but many of us are still using software that was written before it was found. Many of our most talented programmers were using this command, not knowing that it would cause damage to disks. A prominent example is Matt Dillon's CShell programs prior to version 2.07. If you are using an earlier version, please get the upgrade. The Delay(n) command calls the timer device and then waits for it. Using a zero should have worked properly, but it doesn't. I cannot tell you if any commercial software is using this call, but it is present in much of the freely distributable libraries on disks more than a few months old.

The last bug is probably one of the most troubling problems we still experience with the Amiga, and it happens to all of us. We insert a disk we thought to be good, but one of the above problems has spoiled it. When the disk is inserted, we get the Task held requester and there is absolutely no choice but to reboot the machine. In a multitasking computer, this is especially upsetting, since we lose all the work being done by other programs. Surely the Amiga should be able to merely tell us the disk is bad, and then go on about its business with the other things that are running. But not so! A bad disk will crash this machine most of the time. Most frequently, the cause is a key out of range, or it cannot read a directory. You will remember that on the Amiga, a key is the sequential number of the block on disk, and must be numbered between 0-1759 on a floppy. The same bug will get you if a hard disk returns a key that is outside its partition. The FastFileSystem in 1.3 still contains the same bug. Currently, there seems to be no relief for this at all. Commodore does promise that, for the 1.4 release when the file system is in ROM, this will no longer be a problem. In that release, they plan to tell us which file has the error, what error code was returned to the driver, and to add a gadget that says something like IGNORE, which will allow the user to have at least the ability to save off whatever work is in the machine before having to reboot.

Whenever any of these bugs or conditions spoil your disk, may I recommend that you use DISKSALV (rather than DiskDoctor) to correct it. DISKSALV can maintain your directory structure, and can usually recover almost everything on a disk. A version for hard disks is still being tested, but for floppies, this is available and is the best.

Perfect?

For almost two years now, I have been proclaiming the wonders of WordPerfect. My copy was purchased in August of 1986. I feel that it is the best word processor for heavy use, and their customer support is truly exemplary, at least here in the U.S.

In the United States, we pay a flat monthly fee for telephone service in local areas, with extra charges for calls outside the local city or county. The standard fee pays for all local calls regardless of their number or duration. Businesses are able to lease telephone lines that permit anyone in the country to call them just as though it were a local, toll-free call.

WordPerfect Corporation is located in Orem, Utah - not one of our larger, better known cities. They have a toll-free number that any U.S. WordPerfect owner can call for assistance, and they keep a bank of 200 people whose sole duty is to help customers with WordPerfect. When I call them, I am first asked whether I use IBM, Apple, Amiga, or Atari. My call is then referred to a person who has been trained to answer questions for my particular machine. There is no limit on the number of calls I can make, neither in number nor in time. These helpers are available ten hours each business day, making it easy for people in each time zone to reach them.

When I reach a WordPerfect operator, I am first asked if I have WP loaded; then whether I am prepared to go through the particular part that has caused the problem. The operator then goes through the operation with me step by step, waiting for me to follow each instruction - and to write it down if I choose. I have never felt rushed when talking to one of them. In most cases, they solve my problem on the first try. These operators know their business.

Should we be unable to solve the problem, the operator makes notes about the trouble and the steps we have taken in trying to solve it. These notes are passed along to the WordPerfect programmers. Solutions found by the programmers are made available to the operators, and subsequent callers will be told how to fix their software until the next release is out. There are separate teams of programmers for each machine, also.

Each time I have called WP, the operator has asked me for the date on the version of WordPerfect I am using. If it is not their latest release, I am asked for my registration number and they send me the updated version. I am now using the fourth revision (April 88), and each of these revisions has been sent to me at no extra cost. They didn't even ask me to send back the old disks. A customer is also permitted to take a set of the original disks to any WordPerfect dealer and have the dealer copy the latest version onto those disks. There is no cost for this service. One of their service operators told me that they considered themselves responsible for bug-fixes. Customers were only to be charged for updates if new features had been added to the program.

Recently, I called the company to ask for a representative to make a presentation to our club. I was connected immediately to their director of Amiga sales. He assured me that the speaker would be provided, and that I would hear from him again the next day. Before lunch the next day, the company's local representative had called to settle the particulars about meeting time, etc. When he came to speak, he presented the club with a copy of WP, and also brought a copy to be given as a door prize. His presentation was outstanding. I cannot speak for the English representatives of WordPerfect, but we think ours live up to the company's name.

With this unbelievable support, I have found it very difficult to say anything adversly critical about this company. Recently, however, I have come to have doubts about the word processor itself. The problem is: WordPerfect seems to be incapable of speaking to my printer, and surely a word processor that cannot do a printout is less than perfect. Getting something to print is such an ordeal that I actually avoid writing anything that requires a hard copy. If you receive a letter from me on disk instead of paper, don't be surprised! I have spent days trying to persuade WP to put a letter on paper. Sometimes it prints, but uses the wrong font. Sometimes it prints the first page and refuses to continue. Other times it does not measure the line length properly and wraps the last few characters back to the left margin. More often, it tells me it is printing but absolutely nothing is happening. On other occasions, when it claims to be printing but isn't - I walk away angrily - and several minutes later, it prints a few lines. This can go on for an hour or more until it finally reaches the end of the document. These responses seem to be totally random, and all with the same commands.

The WordPerfect staff have tried many, many times to help me. Their programmers have not yet solved the problems caused by the Star SG-10 printer. True, no one else has made this printer behave well when connected to an Amiga, but I expect more of WordPerfect. From them, I expect miracles.

What about the new 1.3 printer support? Not yet. WordPerfect refuses to support anything not yet released and supported by the computer manufacturer. This is reasonable. Had there been a driver for this printer in 1.3, I could use it by choosing Amiga printer for my output. WordPerfect even provides a means of writing my own driver, and it is surprisingly easy to use, but my attempts have not helped the SG-10. My printing difficulties seem likely to continue until I purchase a Preferences-supported printer.

Challenges and surprises are an important part of our lives. It seems that I can count on this printer to provide mine.

***

DISK QUALITY AND REPAIR (An Extra Thought)

by Jim Butterfield

Reports from the West Country (Dorset and Texas) have discussed disk quality, brands (no, not for cattle) and related matters such as Librarians' curses and incantations. I'd like to add some bits of my own.

All disks seem to have manufacturing "off days". Impurities such as sulphur and selenium can creep into the oxide mix (cries of "who's been eating garlic?") and ruin a day's production. In such cases, you may find a whole box of bad disks, even from a reputable manufacturer. "Tested" disks can create new problems as they screen out the manufacturing quality part. What the manufacturer writes on the disk may be hard for your drive to erase completely. Indeed, a major cause of failure is the magnetism on the disk when you buy it. This could be test data, or it could be caused by sitting in a steel-framed building for too long. Your drive's read/write head may not have the energy to overcome it, and in any case, would leave magnetic "noise" between tracks.

What's the solution? A magnetic bulk eraser, sometimes called a demagnetiser. It will scrub your disk as (magnetically) clean as a newborn baby's cheeks. And your subsequent data will be recorded on a surface as (magnetically) pure as new snow. Use of a bulk eraser will re-habilitate over half of your "bad" disks - the ones that wouldn't format when taken straight out of the box. It can be a worthwhile practice to treat every new disk before use.

The device works by applying a violently oscillating magnetic field to your disk. It calls for you to separate disk and device before cutting the power so that the magnetic treatment is gradually reduced. Do not use a permanent magnet, which makes things worse. A bulk eraser is a standard accessory for audio tape user. Used before recording, it dramatically reduces tape hiss. Thus (I thought) it should be easy to pick one up at any local audio store.

With this in mind, I set out one saturday morning to pick one up and thus ease the furrowed brow of ICPUG librarians. To my astonisment, it turned out that there was not one to be found in all of Tottenham Court Road.

This creates a small problem. You need one, but I don't know where you can get one (you can make one yourself by butchering a transformer, but that's another story).

Mike Todd to the rescue. Mike thinks he can find a source of these devices, and will hopefully add a note elsewhere giving this information. He also told me (hoping to make me jealous) that he has one at home that goes "Ping!". I'm not jealous, though. I'm not.

SCRIPT/PLUS UPDATE

by Richard G Hunt

Script/Plus is a cartridge-based wordprocessor for the Plus4 and is superior to 3+1. It is now difficult to obtain, and if you want one, refer to page 165 of the March/April issue for offer details, and page 226 for the address of Precision Software. The following should help you make good use of the cartridge.

Although it prefers sequential files I have managed to load program files. Try a READ ME file from the library. Enter the usual ESC l filename <return>. Although there is some garbage, text is readable. 3+1 files also load, although editing may be needed to get rid of control characters etc. If a file does not load correctly with ESC l, try ESC <shift> l. This performs a "convert load" as if loading files from earlier versions. Of course any file not created by Script/Plus will not have formatting controls. These must be added.

To store a BASIC program as a sequential file, load the program from disk or tape. Do not RUN it. Enter the following:

```
DISK:  OPEN8,8,8,"0:afile,s,w":CMD8:LIST:PRINT#8:CLOSE8 <return>
TAPE:  OPEN1,1,1,"0:afile,s,w":CMD1:LIST:PRINT#1:CLOSE1 <return>
```

Enter Script/Plus and load the new file. It is imported in lower case. Position the cursor at the start, issue the command ESC U, and all following text is converted to upper case. ESC U converts back to lower case as well. The file may now be edited and saved like any other.

One of the tasks I find most tedious but necessary is routine saving during the creation of a text file. Throwing my hands about the keyboard has occasionally jogged the cartridge with disastrous results! I therefore invariably place a comment on line 1 of the text, thus:

```
*nb"@:script/plus"
```

* represents the reversed asterisk obtained by pressing CTRL-9. This comment line contains the @ replace symbol, overcoming an occasional bug mentioned in an earlier Update article. Those with 1541 disk drives should be cautious about using the @ replace facility. The following saves the file:

```
ESC f <shift>/<clear> <return>
```

<shift>/<clear> finds the first occurrance of text within double quotes. Repeated presses scan through a list of filenames as, for example, listed to screen by the disk mode command

```
CTRL-0 +$0 <return>
```

To save only part of a document, mark a range of text by using ESC r and the cursor keys. Text is highlighted and blocked by pressing <return>. Then issue:

```
ESC <shift> f
```

Script/Plus prompts for a file name for the marked range. All format commands are prefaced with a reversed asterisk * (CTRL-9).

lf1	linefeed on	lf0	linefeed off
ju1	justify on	ju0	justify off
cn1	centering on	cn0	centering off
ra1	right alignment on	ra0	right alignment off

These affect all following text until a further format command is encountered. Left alignment means that text is aligned to the left margin; right alignment to the right; justified aligns text to both margins. If justified and right alignment are not set then left is assumed. Right alignment takes priority over justification.

ptxx	set characters per inch where xx is 8, 10, 12 or 15
lpxx	set lines per inch where xx is 4, 6, 8 or 12

Page length must be set before, and must be greater than, text length.

plxx	set lines per page (page length) dependent on paper size
tlxx	set text length - 3 lines for header and 3 for footer are assumed

For standard A4 paper, when headers and footers are not used, try:

```
*pl70:tl66 <return>
```

fp0	forces a page break
fpxx	forces a page break where xx is the minimum number of lines required as a block. If the number of lines available is less than that, a page break is forced

Two lines of headings are allowed, hdxx is the first, hsxx is the second, where xx is the number of lines between the heading and the next header line or text.

```
*hd4:,,This is right aligned
*hd3:,This is centred,
*hd2:This is left aligned,,
```

Similarly, footers are created with the commands ftxx and fsxx. The difference between pl and tl must be (ft + fs + 2). The footers must follow pl and tl. xx is the number of lines from the first to the second footer line or to the bottom of the page. The header and footer text must not exceed 256 characters. It is often useful to place page numbers in a footer, as follows:

```
*ft2:,Page <ESC> #, <return>
```

This produces a centered page number starting at page 1. The # appears reversed. The page number and margins may be set with:

p#xx set page number (xx)
lmxx set left margin
rmxx set right margin
maxx release margin by xx characters

If header and footer margins are different to the text margins set them with:

hlxx set left margin hrxx set right margin

Alternate headings and footings are also possible, but with only one header or footer line. The hd and ft lines become the header/footer for odd numbered pages, and the hs and fs lines for even numbered pages. The setting is:

ah1 set alternate headings af1 set alternate footings

The distance between the top of the page and the start of text may be set by:

vpxx set vertical offset

The minimum width between margins is 15. The maximum right margin is 254. It is possible to print columns of text. Correct printing of columns is achieved with a second (or third) passing of the paper through the printer. The offset statement sets the print start column. Normally it is column 0, but if set to 40, printing starts at the centre of the page and continues to the right margin.

ofxx set offset where xx is the number of columns from the left
eoxx set even offset, for even numbered pages (odd numbered pages taking the of offset)

lnxx output xx blank lines
prxx create xx blank lines after a carriage return
spxx set spacing between lines of text, where xx is 0, 1 or 2

ps pause: printing is interrupted to allow for user action

Linked files are chained by: `lk:filename <return>`

It must be the last line of the file, with nothing following. Linking may be necessary with long documents. The maximum number of lines permitted in 40 column is 500, half that for 80 columns. Two sessions may be held in memory at one time and are swapped with ESC j. The Script/Plus default settings are:

lm1; rm80; hl as lm; hr as rm; pl66; tl60; vp0; of0;
lf0; sp0; ju0 (off); cn0 (off); ra0 (off); pt10

Script/Plus issues a 'Format Error Type X' message when a format command is incorrect or contains an invalid parameter.

A Format command does not exist.
B Invalid character after command. Must be colon, semi-colon or <return>.
C Number too large for command.
D Invalid number (non-numeric, invalid pitch or form advance)
E tl number greater than pl number.
F Wrong number of commas in header or footer.
G Header or footer too long (max 256 characters) or pause message too long (max 30 characters).
H Print width too narrow (rm minus lm is less than 15).
J Left margin=0.
K Left margin greater than right margin.
L Header number too large (must be less than tl-1).
M Too many (more than 20) control characters in line.
N Format command not at beginning or end of line.

THE NEXT SOLUTION

In response to Mr Bromfield's letter published on page 364 of the last issue, several members wrote in with detailed explanations of why the program fails.

Jim Butterfield: The technical reason your program fails is that your Y-Loop is opened within a subroutine and a RETURN cancels all such loops. Programming style pundits call this 'Bad nesting' showing your program equivalent to:

```
FOR X= ...
  FOR Y= ...
NEXT X
  NEXT Y
```

James Kew: It is poor programming style to exit, and especially to RETURN from an unfinished loop. Attempting to re-enter such a loop rarely works. The problem is caused by the storage of the FOR/NEXT and GOSUB/RETURN information on the stack. When the RETURN is executed the stack consists of:

```
FOR/NEXT X-LOOP INFORMATION
RETURN/GOSUB INFORMATION
FOR/NEXT Y-LOOP INFORMATION
```

To fetch the RETURN details, the interpreter discards the Y-LOOP details, producing the NEXT WITHOUT FOR error when NEXT Y is encountered.

Bill Temple: Every new variable in a FOR loop is checked against the current stack contents and, should an active loop exist with that variable, the stack pointer is reset to the previous loop, effectively erasing all subsequent loops.

G B Judd: When FOR is encountered, its details are placed on the stack. When GOSUB is encountered, the return address of the following statement is placed on the stack. NEXT inspects the stack to determine what to do next. RETURN inspects the stack to find out where to return to. When RETURN is executed the error occurs. It scans down the stack looking for a return address. If one is found it is removed with all items stacked above it. So when RETURN is executed in line 30, the details of the Y-LOOP are removed with the GOSUB/RETURN address. When NEXT Y looks for the corresponding Y-LOOP details, it can't find them and the NEXT WITHOUT FOR message appears.

AMIGA—NEW PRODUCTS

2 MEGABYTE INTERNAL MEMORY EXPANSION FOR A500 (1½MEGS A1000)

SPIRIT's all NEW S 500-2 Internal Memory Expansion Board is user-expandable from 0K to ½, 1 and 2 megabytes of fast memory, requiring only 4 chips per half meg. The memory autoconfigs in the standard Amiga expansion range with RAM on/off. An installation disk includes useful public domain programs such as recoverable RAM disk, file utility and more.

The memory board's low power consumption safely uses Amiga power. An optional external power configuration is included. The S 500-2 has all new circuitry that is specifically designed to install comfortably above the motherboard, has no physical conflict with any existing components and sits under the radiation shield in the ventilation air flow. It is quickly and easily installed with no jumpers to attach and no soldering required.

HARD DISK ADAPTOR FOR A 500 AND A 1000

Now you can connect inexpensive IBM compatible hard drives and ST-506 controllers to your Amiga A500 or A1000 with SPIRIT's NEW HDA-506 Hard Drive Adaptor which also includes an installation disk with driver software.

The HDA-506 Adaptor is enclosed in an Amiga-matching metal chassis with passthru and draws its power from the hard drive power supply.

Optional complete Amiga compatible 20 or 40 MB hard drive package systems are available from SPIRIT.

ST-506 PC bus adaptor lets you utilize inexpensive IBM type hard disks and controller boards—in chassis with passthru with speeds of over 300K per second—faster than a RAM disk!

MIDI INTERFACE—MULTIPLE PORTS, LED STATUS

SPIRIT's NEW MIDI STAR is definitely the most versatile and complete MIDI interface available. It gives you control of up to 2 INs, 6 OUTs/THRUs and an RS-232 interface, all switch selectable. MIDI STAR provides you with valuable time and trouble saving 'patch panel' distribution and 'star' configuration to eliminate or reduce instrument daisy chains, signal delays and cable changes.

For quick, easy status confirmation all ports have 2-colour LED indicators. Red or green LED tells you if your port is an OUT or THRU (or OFF when desired) and blinks when passing MIDI data. The MIDI STAR with 2 INs also includes LED input port status indicators plus switch control to allow selection of either IN source to all OUT/THRU ports or split distribution.

The RS-232 serial port includes passthru and is switchable on/off. MIDI STAR has an internal power supply and a universal cable that interfaces to Amiga A500, A1000 and A2000.

The MIDI STAR is optionally available with 1 or 2 INs, 4 or 6 OUT/THRUs and with or without the RS-232 interface. Just released at the Comdex Show.

……

DEMO disk available for the Spirit Boards. State model and send one disk with return postage. For full details and specifications with prices, please send a large SAE for fact sheet on all the AMIGA products.

……

128 SOFTWARE—SILLY SUMMER SALE

FONTMASTER 128 with SPELLMASTER normal price £49.95. **SALE PRICE £29.95** + p&p 95p
CANNON 128 v2.0 copier for 1541/1571/1581 normal price £24.95 **SALE PRICE £4.95** + p&p 80p
HELPER 128 programmers aid normal price £24.95 **SALE PRICE £4.95** + p&p 80p
1571 FIX ROM was £24.95 **SALE PRICE £14.95** + p&p 50p

You will not see the above advertised nationally and they will be available to the first 25 orders received from ICPUG members only. Sorry, at these prices cannot accept credit cards.

BYTES & PIECES, 37 Cecil Street, Lytham, Lancs FY8 5NN
UK Agent for SPIRIT TECHNOLOGY and XETEC Inc

MIKE'S MEANDERINGS

by Mike Todd

There are many different categories of free software currently available to ICPUG members: public domain, freeware, shareware, freely distributable, demoware and copyright-free software.

Rarely, if ever, does a software author relinquish his rights to a software product or section of code. Instead, very often he or she is happy for the software to be included in any distributable form and passed to as many people as demand dictates provided that the copyright messages are retained, and full credit is given.

The term public domain is a tricky one, since it doesn't seem to have much legal standing in the UK. The implication is that software placed in the public domain has been given in all respects to the public at large. Therefore, an author so doing would effectively relinquish any claims to copyright.

Any other form of distribution wording will state in detail the terms of its distribution, usually specifically stating that the author retains copyright.

Demoware is software put together by software houses to publicise their products and will usually either be a cut down version of their full commercial release, or with some features missing (most notably any SAVE feature).

Freely distrutable software is just that, once again provided that the wishes of the author are respected.

Shareware is one type of distribution that is not fully understood. It originated from groups of authors who wrote software that they felt their professional colleagues would find useful, but would perhaps be unwilling to buy. To obtain the software, you would usually send something you had written to the author as an exchange.

This wasn't always very successful and it evolved into "pooling" software, with any other contributing author having access to everything that was there (there is at least one instance known of a one-in, one-out policy). This was a closed community, and copyright notices associated with the shareware pool specifically excluded distribution outside the pool.

With the much larger pool of Amiga software, for instance, controlling access is much more difficult. Instead, some authors accept that many users of their software would not be software authors themselves, and therefore couldn't contribute to the pool. Instead, they add the proviso that, should you find the software useful, a financial contribution to the author would be considered fair compensation for the fact that the original author couldn't take advantage of anything you'd written. Donations to authors usually range from $5 up to $30, and if you're using such shareware, and haven't contributed to the public pool, a donation should be considered a moral obligation..

In the UK, it is difficult to make such contributions without resorting to special cheques from your bank, but it can be done.

There was once an idea that a special clearing house be set up in the UK to accept shareware donations. It seems a good idea, perhaps with those donating sending their money to the clearing house, and a letter to the author saying what had been done. By doing it this way, a check could be made that money going into the clearing house was coming out again! Perhaps this is something that ICPUG could consider.

Before leaving the subject of free software, I wonder why it is that there is very rarely anything originating in the UK on Fish disks.

What is a review?

I have been evaluating software and hardware products for nearly ten years now, in a professional 'consultant' capacity, as a commisioned author for some of the big-name computer magazines, and for ICPUG.

In that time, I have learnt a great deal about what is and what is not a review. Sadly, many reviewers are either not in a position to study a product in depth or are frightened that their source of free software or hardware may dry up if they write anything overly critical.

As a result, some reviews are re-writes of the sales literature or summaries of the user handbooks with only the most fleeting comments on some aspects of the item included to make the review look objective.

I stress that this is not always the case, and some reviewers are better than others - but time and promises of further products for review are very strong influencers of what getswritten.

It is also interesting to see how software houses or hardware manufacturers respond to 'bad' reviews.

I have seen one software house take a critical review so seriously that they paid the reviewer to work with them on revising the product, while another hardware manufacturer hadn't realised the problems with the hardware they were producing and made major modifications.

On the other hand one company has drawn up a 'black-list' of people who will not be allowed to write future reviews of their products (something impossible to enforce!) and one has used commercial pressures to prevent a critical review being published.

There are others who respond very neutrally to any review, accepting that any publicity is good publicity.

It is true to say that a reviewer has a duty to be truthful in what he writes, but on the other hand should not be afraid to criticise, especially when that criticism comes of real experience rather than a cursory glance at the product in question. Remember that all the positive hype of a product can be done in the manufacturer's advertisements - a reviewer shouldn't have any need to repeat this, his readers can get that for themselves.

On the other hand, readers of reviews need to be very aware of the context in which a review has been written. Was the review commissioned, and if so by who? It has been known for software houses to commission (or at least promote) reviews in order to guarantee a favourable reaction. Some magazines will not normally publish submitted reviews, only those which they have commissioned or which are written by their regular contributors.

How much does the review reflect a personal opinion and how much is simple rhetoric gained from reading manufacturer's literature? If the review is critical, is it constructively so? Does the review reflect some experience or is it just a superficial examination? All these questions need addressing while you read the review. Indeed, try asking yourself why you are reading it in the first place. Are you doing so because you are considering buying the product, or because you are just interested in it?.

I hope that all this will help make more use of the reviews which you will read, both here in the ICPUG Newsletter (where it is very rare indeed to have a commissioned review) and in the glossier magazines.

In the end, if you buy a product and are unhappy with it, don't be afraid to let the company know - indeed, remember that, assuming that you're buying as a private individual, you are entitled to all the legal backing of consumer legislation and that the goods must be as described and fit for the purpose.

The Commodore Show

As many of you will be aware, I've been out of circulation for quite some time. This has been due to pressures of my full time job, some ill- health and some family problems. These problems were not that serious (despite some of the rumours circulating at the show!) and related to my parents. I have not been divorced as some have suggested - indeed, I'm not even married (yet!).

Now that most of these have been all but resolved, it was nice to get to a show and meet all those I haven't seen for such a long time. Of all those people, I was so very pleased to see Betty Clay who I first met in Canada while I was tutoring/lecturing at a couple of computer summer camps in Canada and the States. Betty has now become part of the ICPUG scene - from her home in Arlington, Texas, she sends over enormous quantities of software for the Amiga library as well as writing for the Newsletter.

She joined Jim Butterfield in his trips to some of the regional groups, and I know that she thoroughly enjoyed her visit. Shortly before her departure, I was able to take her up to Ashwell - a small village in Hertfordshire - were we had a drink and a bite to eat. Ashwell is a very English village, and as we left the pub, we encountered a group of local Morris Dancers. I think betty saw many aspects of the English, from Morris Dancers in Hertfordshire to a trip to Chartwell, home of Winston Churchill - from the Commodore show in Hammersmith to a guided tour of Wapping high street.

Anyway, back to the plot! There really seemed very little at the show which could be described as innovative. All the usual software and hardware items were there - but not a lot of quality music software, nor anything really new. About the nearest I could find to an innovation was the Bernoulli drive from Burocare. This is basically a hard-disk drive, but with removable disk. This means that you can have a 20meg disk drive on your amiga - although replacement disks are around £50 each. When I originally heard of this product it was going to cost over £1500 but this has been brought down to well under £1000 and should be a worthwhile addition to any serious configuration.

One other thing I found most impressive was the ICPUG stand. It was spacious, well positioned and attractive. A stand at a show needs lots of room to allow deep and meaningful conversations to be had - ICPUG certainly had that. I'm only sorry that I missed the seminars on the Friday.

***

***** SPECIAL OFFERS FOR ICPUG MEMBERS *****

THE REAL THING - 1571 UPGRADE ROM...
Now you can cure the bugs for just £10! Why pay more?

...AND NOW - CBM 128 UPGRADE ROMS
Three upgrade ROMs for the 128, part numbers 318018-04, 318019-04 and 318020-05. Numerous bugs fixed for £20!

POWER C - PROGRAMMING FOR THE FUTURE
The language used predominantly by professional programmers on 16/32 bit micros is now on 64 & 128. Until 30th September you can save over 30% at our ICPUG price of £30 (64 or 128). Add £10 for both versions!

THE AMIGA 1000 LIVES!
We have a few A1000s - the U.K. version with 12-months on-site maintenance. With 512k and monitor £699, without monitor £499.

10Mb HARD DISK FOR A1000
Manufactured by C Ltd, with pass-thru, ONE ONLY £449 O.N.O.

AMIGA SOFTWARE CLEARANCE
Deluxe Paint £15; Deluxe Print £15; Graphicraft £10; Grand Slam Tennis £10; Winnie the Pooh £10

HARDWARE JUNK SHOP - HOURS OF FUN
The following items are sold as probably not working. You could have hours of fun getting them to go! Cash and carry prices - carriage/packing is extra. Sorry, no more information - time is money (life's a gamble!).
Microline 80 parallel printer £15; Anadex DP8000 parallel & serial £25; IBM 3982 golfball with PET interface £10; Compunet 64 modem £10; Prism acoustic modem £20; Epson internal IEEE interface £15; C16 (no power supply) £10; Entrepo C64 wafer drive £15; CP/M Softbox £50

PET POURRI
We have stocks of virtually every model that Commodore made, from the 2001 to the 8296D, floppy disks, hard disks, and printers. Most is reconditioned, but some items are brand new! **All equipment is covered by a 3-month Guarantee**, and we will repair it after that at our usual rates. Don't forget, we still have a catalogue of 200 PET programs!

COMMODORE 64 BARGAINS
EasyScript (disk) £10; Future Finance £10; Master 64 £20; Reference Guide £5; Inside the 64 (source listing) £5

Add 15% VAT to all prices except books

SUPERSOFT
Winchester House, Canning Road, Wealdstone, Harrow HA3 7SJ
Phone: 01-861 1166 Fax: 01-861 1773

COMPUNET AND ICPUG

by Brian Fowler

Compunet is a service available to anyone who owns an Amiga or 64/128(D). Atari ST owners can also access Compunet. A suitable modem is also required. The one supplied for the 64/128 has communications software in ROM, while the Amiga can use almost any type of modem, with software freely available on disk. Once the modem is connected to your phone socket, most UK members will be able to access Compunet at local call rates. You are now connected to what amounts to an electronic colour magazine.

There are sections devoted to comms, arcade games, adventures, news from the computer world, jobs, the list goes on and on! Also available is a large amount of software - most of it free. However, should there be a topic in which you are interested, but does not appear, then you can set up your own area - and this is what ICPUG have done. The ICPUG area incorporates a software section, 64/128 sections, an Amiga section and a Technical Help section - but again, if we need more sections we can set them up.

I would be pleased to hear from any member with ideas/suggestions for the expansion of the ICPUG area on Compunet. Send me a mailbox (another Compunet service!) and we will do what we can. Address your mailbox to me - my Compunet ID is BF6.

⁂

This article will never be published because it will always be in the future. If it was, or had been, started in the past, then it would already have been written. For the present, it lies on my desk gathering dust. The dust has accumulated on it, and now that I have finished it, it is ready. If I would have had, and methought that I could well have had, reason to have written such an article, which should be written sooner, rather than later, although one can envisage a time when it will be ready, despite the problems that writing such an article presented, I may well have started to begin writing it when I had more time. In the past, this article was imperfect; the future article may well be perfect

⁂

PENPAL CORNER

by Ian Cassidy and Mark Stanton

Welcome to a new Special Interest Group. The principle aim is to help you communicate with fellow members who have similar interests or hobbies. It is quite clear from Readers Write that some of you feel that your particular machine is being ignored. As time and technology march on, one expects new computers to be explored with the same enthusiasm that was spent on previous machines. Nobody is more interested in a machine than the owner.

The level of participation is in your hands. Don't hope that the next Magazine will contain something of interest to you. Dust off your writing pad, and write to us at Penpal HQ. Your details will be entered on the database, and you will be put in touch with other members sharing a common interest. Membership figures suggest that there are some 300 Plus4 owners who could join forces and produce articles and programs of interest. [We would be more than happy to print the fruits of such a venture - Ed.]

Although there have been changes in the 8-bit range of micros, most programs can be converted to run on any computer. So if you have seen a handy little program written for another Commodore machine, and you would like it to run on yours then send us details. We will endeavour to find a programmer willing to undertake the task of converting it.

Over the last year there has been a marked increase in the number of Amiga owners. Here is your opportunity to chat to fellow members and exchange information. Mark Stanton is an Amiga owner, and he is patiently waiting for a penpal.

The information required for the database file is as follows: Current membership number; name; full address including postcode; computer; specific computer interests; hobbies; and number of penpals required. The membership number is important as it will be the key field in the database. Please remember to include an SAE for the reply. Write to me at:

Ian Cassidy, 9 Haldane Crescent, Kirkton, Dundee DD3 OJN.

Penpal corner will appear periodically in the Magazine to keep you up to date on what is happening. I would like to thank our illustrious Editor for the help and encouragement he has given in the forming of this new corner. So until the next time remember, don't write tomorrow. Write today!

REGIONAL NEWS

Area	Contact	Telephone	Meets
Ayr, Scotland	John Smith	0292 261408 Ext. 202	3rd Wed.
Basingstoke, Hants.	Colin Smith	0256 55262	1st Mon.
Bury St. Edmunds	Alan Morris	0284 69661	2nd Wed.
Camberley, Surrey	Dick Faulder	0252 713818	3rd Wed.
Canterbury, Kent	Ron Moseley	0622 37643	1st Wed.
Coventry, West.Mid.	Will Light	0203 413511	1st Wed.
Derby	Ray Davies	0332 41025	2nd/4th Tues.
Dublin	Geoffrey Reeves	0001 883863	
Durham	Jim Cocallis	091 3867045	
Edinburgh	Martin Lowe	031 557 4242	
Hertfordshire (Stevenage)	Brian Grainger	0438 727925	1st Fri.
Kilmarnock, Scotland	John Smith	see Ayr	1st Wed.
Liverpool	John Swallow	051 521 6910	Wed.termtime
Macclesfield	Melvin Mayers	0625 32852	Alt. Tues.
Mildenhall, Norf.	Joe Bowman	036283 8439	
Min. of Defence	John Jeoffrey	01 218 0988	Monthly

Mid-Thames Group (Reading)	Brian Jones	0734 661494	2nd Thurs.
North Gloucester	Closed Temp.		
North Hants (Farnborough)	Ron Geere	0256 26830	3rd Wed.
Paisley, Scotland	Charlie Heath	041 889 8929	
Sheffield	Phil Hicks	0742 682275	
Solent (Titchfield)	Anthony Dimmer	0705 254969	1st/3rd Tues.
South East Group (Biggin Hill)	Brian Wise/ John Bickerstaff	0903 787559 01 651 5436	Thurs. except 1st
South West Group (Charmouth/Exeter)	Peter Miles	0297 60339	
Swanton Morley Norf.	Joe Bowman	036283 8439	
Watford	Rod Eva	0923 50161	3rd Wed.
West Riding Group (Wakefield)	Kevin Morton	0532 537318	1st/3rd Wed.
Wigan	Bryan Caswell	0942 213402	
Wolverhampton	Mr. Whiteley	0902 733332	
Disabled Group	David Bate	0296 842707	
1520 Plotter Group	John Bentley	06286 65932	

***

MID-THAMES GROUP - RECHRISTENED

By Mike Hatt

The name changing of the old ICPUG Slough-Berks Group to Mid-Thames Group was celebrated in fine style on the evening of Thursday 2nd June 1988 when a fine turn-out of members assembled in the luxurious surroundings of Shire Hall, Reading to witness a typically entertaining talk and demonstration by the great Jim Butterfield. As a bonus, Jim was accompanied by the charming Betty Clay from Texas whose articles have added a new perspective to recent issues of the ICPUG National Newsletter.

Jim introduced Betty to us as a mainstay of Amiga disk distribution - Jim's postman is apparently flagging under the weight of all the disks! Both our transatlantic visitors were then amazed to find that what they thought was a small Amiga RAM pack was one of the mini 3.5" drives; apparently this is one area where Europe has a lead, they haven't yet thought of putting an Amiga drive into such a small casing in the USA or Canada.

The main body of Jim's presentation was a comparison between the 8-bit and Amiga machines which gave the owners of either type something to be pleased about. Those of us with 64s can continue boasting about the screen editor whilst Amigans can now do sleight-of-hand with asterisks (assuming they followed Jim's tricks very carefully).

Amiga matters continued with some discussions about Workbench V1.3 which will apparently solve many people's problems. Rumours of an eventual high-resolution graphics V1.4 for special applications giving an effective choice between two breeds of Amiga are, we were told, still very much rumours. Reading between the lines it appears that the wiser CBM gurus are avoiding any confidential information like the plague because there are strong suspicions that any further developments after V1.3 will all change anyway. However, the V1.3 Workbench will bring Shell-like user-friendliness to the Amiga and make it a much handier machine. (If any of this doesn't make sense, bear in mind this reporter is a 64 man!)

Finally, Jim had some words of caution, advice and comfort about the virus situation. The most important message of the night was that strength to resist the virus hooligans came from all of us in the user groups keeping in touch and pooling our knowledge, help and resources to assist our members and all Amiga users to defeat the virus menace. The meeting acclaimed Jim's presentation and this final message with unanimous applause. A substantial number of the audience accompanied our guests to the Black Boy public house where we did our best to show our Canadian and American visitors some of the better British traditions!

There was general appreciation of the efforts of member Richard Wilson whose assistance to the Emergency Planning officers at Berkshire County Council had obtained the offer of the room. The Berkshire ratepayers can doubtless sleep more soundly at night with ICPUG-checked software watching over them!

Those who have known the group under its old Slough/Berks name will know that in the past organiser Brian Jones has often managed to obtain a meeting room at the Students' Union in Slough College where he lectures on Computer Science. However, this has always been largely dependent on the level (or lack!) of activity among student societies, and for some events the venue has been the Beehive Playgroup hut next to Maidenhead Sports Centre - how cute we all looked sitting on those little chairs!

While the delights of the playgroup may still be available for some occasions, the Mid-Thames Group are hoping to hold most of our meetings in future at the Community Centre just off the North side of the centre of Bourne End, a few miles North of Maidenhead - any new Commodore staff please note, this is within easy reach of the office and there is a bar in the Centre, so feel free to bring along any new CBM goodies for an appreciative audience!

Meetings are normally on the second Thursday of each month excepting August; occasionally there has to be a change to another day, typically the second Wednesday, but in any event the latest information can be obtained from Brian Jones on Reading 661494. Anyone along this part of the Thames Valley from West of Reading to the western part of London, or even further if you don't mind the driving, is welcome to come to meetings of ICPUG Mid-Thames. If you join the group, the subscription is reduced for ICPUG National members.

***

SOUTH WEST REGIONAL GROUP

Group Report

Pete Miles' Queen's Armes Hotel at Charmouth, Dorset was the setting for the first meeting of the South West Regional Group on Sunday 26th June 1988. In all 9 enthusiasts turned up and spent a pleasant couple of hours discussing various aspects of computing.

Pete opened the meeting by welcoming those present, and then went on to outline the role played by ICPUG National in setting up the first meeting. Pete then explained the concept of Regional Groups and the relationship with the National Group.

After mentioning his own role within ICPUG (Pete is our Amiga Librarian), he went on to mention such illustrious members as John Bickerstaff, Joe Griffin, Jack Cohen, Tom Cranstoun and Simon Tranmer. Those of you who are acquainted with Pete will know that he revels in this sort of namedropping!

We then briefly discussed the types of computer and peripherals used by each member, and it was good to see that the list included 64s, 128s, Amigas and PETs.

Pete Miles then demonstrated his A1000, and talked briefly on utilities such as POPCLI and Matt Dillon's Shell.

While this was going on, Brian Fowler shut down his 128D, which had been running the COMAL cartridge Demo, and shortly afterwards Pete was nonplussed to see the 128 running the famous Amiga "Bouncing Ball" demo (courtesy of Eddy Carroll's C64 program).

Following this, the 128D was shown in each of its three modes, and we went on to discuss comms. Pete gave a short demonstration of Compunet, including the downloading of an IFF graphics file, and completed his demo by accessing CIX, which is a scrolling-type Bulletin Board.

After fixing the next meeting for 10:30 am, Sunday 17th July at the Queen's Armes Hotel, Charmouth, Brian Fowler closed the meeting by thanking Pete for the use of his premises.

Enquiries concerning the SW Group should be directed to either Pete Miles (Compunet id PGM4) or Brian Fowler (Compunet id BF6). All are welcome.

***

FROM 64 TO PC (ACROSS A CROWDED ROOM)

by WGC Austin

I needed to transfer files from a PET and CBM64 to a PC clone. Having tried lots of home-brewed kits with varying degrees of success and unreliability I was beginning to despair. I telephoned YER and they suggested I try their kit, stating that if it did not work they would take it back. I placed an order and within a couple of days the bits arrived. The interface, which transforms the 64 user port signals to +12V and -12V from the 5V CBM TTL, is neat and measures only 5x7x1 cm. The top is clearly marked, though perhaps a blanking key would also stop idiots like me putting it on upside down. The cable is fitted into the interface with a 5 pin reversable molex plug. They have avoided the need to swap over the Rx and Tx lines when the 64 is transmitter or receiver.The cable length is made to order and the plug at the PC end can also be customised. My cable is about 3 metres long, enough to join my 64 and PC.

The disk has several programs. The only one I need is 64TERMINAL, although I tested the others. The PC file transfer software is very easy to use. Within an hour of fitting the hardware and loading the programs I was sending PETSCI files as ASCII to the PC at 2400 baud. There was no point in using the binary transfer facility as PET machine code programs cannot run on the PC anyway.

Converting my Commodore files to sequential files, I have managed to transfer many large datafiles into a PC spreadsheet, importing them without any problems. I was pleasantly surprised to find that my 64 BASIC statistical programs also ran on my PC, with little modification. have also managed to compile some transported BASIC programs using TURBO BASIC. Transferring WP files created on the PC to the 64 I can print them out on the DPS1101

The hardware and software is different for the Plus4 and 128 so you will need to specify which computer you are using. I am a very satisfied customer.

York Electronic Research, Fishergate Centre, 4, Fishergate, York, YO1 4AB.

CBM 64/128/PLUS4 Bi-Directional interface with software £34.99.
IBM PC FILE TRANSFER UTILITIES, £9.99

***

128 LIBRARY

by Chris Wright

I have released three single sided disks (one disk for the 1581) containing helpful programs and utilities for those interested in CP/M. There is not much documentation (on purpose) so you can work your way through them. If anyone is still struggling then send me a stamped addressed envelope and I will in turn send you a list of all the labels, commands and extensions with details of what they are and do. Also explained are some of the most common comands, help in using ED, and brief summaries of what each program is about. As a postscript for CP/M did you know that pressing the bottom 'down' cursor key repeats the last command you entered? You did? I bet you didn't know how to access KAYPRO II format. The computer logs it as KAYPRO IV. You know it has data there but the drive won't read it. Solution: press the upper left cursor key at the KAYPRO IV highlight bar and the bar then reads KAYPRO II. Hit <return> and the data is there. A couple of other keys are already programmed to perform simple functions but I'll let you find them.

As promised, I am releasing a number of 128 mode disks. I have released five new General disks with possibly one or two more utility disks as well. All the new disks have an auto-boot on the directory. Rather than waste space in the Newsletter, ask your copier for the latest catalogue disk. 1581 requests now have ALL the 128 mode disks 'four-up', that is to say the disk has been partitioned into four, with a full disk is in each. There are programs on these disks for you to access these partitions. CP/M is not done this way, so the usual requests to be joined together please. I will try to put four CP/M disks on each 1581 disk. More disks are coming in from the States and elsewhere so watch this space. To those who have already sent submissions, thank you. To those who haven't and are siting on them, please send them in. Please note that A1 has now been made to work (thanks to Mr Doncaster) and John Green has fixed a couple of bugs in his Lazy Greenius which is now on version 2.00. 1541 owners wanting to upgrade to V2.0 of U1 send only one disk as the documentation has not been changed.

That's it for now. We now have well over 50 disks in the library so this should keep you happy for a while. If there are any 'NEWSFLASHES' I will include them on the catalogue disk as a seperate sequential file to load and print from your Wordprocessor (as can be done with all the catalogue files).

PS. I knew I was safe in offering the 'Bognor' holiday. Packaging has improved so keep it up and don't slip into the bad old ways again.

C-64 LIBRARY NOTES

by David Miller (C-64 Library Organiser)

Summer is here, and while you have been slogging in the heat I have been flogging the midnight oil (no Ed, I have not become an oil salesman), working my way through a pile of disks from around the world, to bring you the latest programs for your trusty 64s and 128s (in 64 mode, of course).

I have compiled a new Catalogue Disk #3 (not an extra disk - an updated version). All previous Cat Disks are now no longer in use. Please note that Library Disks Nos 1-16 are no longer available. This doesn't mean that you can't get the programs, most of them are in the library on other disks.

Would librarians please return all old disks (1-16 plus Cat #1 and #2) as by now you will have received the updated disks. With the amount of new disks added to the library I have to buy blanks quite frequently and I'm getting fed up with Jennifer beating me with a depleted cheque book.

Now for some thanks to members and others for programs that they have provided for the library: Jens Guld in Denmark, Eddie Carroll from Ireland, Frank Murray and David Hills from the U.K.

Two new librarians have taken over this month so please check your librarian before you post disks. Joe Quintin from Norwich (unfortunately his name was ommited from the May/June Newsletter has taken over from me for initials A-B, and Norman Wright from New Romney in Kent has taken over from Geoff Crowther (G-K), who is moving. Thanks for all your hard work Geoff - much appreciated. Please ensure that you remember your updated membership No. as we hate to return uncopied disks because of outdated Nos. Also please check the postage is correct (both ways) as librarians have been instructed not to accept postage-due packages. It is an unpaid job and I don't think it fair to expect them to have to pay out. Now for this month's new disks :-

Catalogue Disk #3
Games Disk #4
Utilities Disk #8
Adventure Disk #3
Ham Radio Disk #1

Games Disk #4 is a little unusual as it includes some help sheets for Adventure Games and other useful hints. Another disk available only from me (I don't feel that many will want it, except maybe new members) is one with all the programs from the C-64 Manual and Programmer's Reference Guide.

```
0  icpug cat #3      03 2a
30    autoboot        prg
11    autodoc         seq
6     printbootdata   prg
7     list-me.a1      prg
7     list-me.a2      prg
13    list-me.b1      prg
7     list-me.e1      prg
9     list-me.g1      prg
8     list-me.g2      prg
8     list-me.g3      prg
7     list-me.m1      prg
6     list-me.m2      prg
3     list-me.m3      prg
8     list-me.r1      prg
8     list-me.r2      prg
6     list-me.r3      prg
15    list-me.u1      prg
17    list-me.u2      prg
14    list-me.u3      prg
18    list-me.u4      prg
7     easy.seq.read   prg
5     adventure   a3  seq
5     business    b2  seq
2     business    b3  seq
4     education   e2  seq
4     games/help  g4  seq
4     ham radio   h1  seq
2     utilities   u5  seq
1     utilities   u6  seq
5     utilities   u7  seq
4     utilities   u8  seq
4     boot.data       seq
379 blocks free.

0  icpug adventures a3 2a
30    autoboot        prg
11    autodoc         seq
6     printbootdata   prg
113   dungeons        prg
```

```
80    epsilon seven   prg
51    enchanted garden prg
87    escape from 13  prg
103   haunted castle  prg
49    spandar         prg
38    gdata           seq
42    sdata           seq
5     boot.data       seq
49  blocks free.

0  icpug games/help g4 2a
30    autoboot        prg
6     printbootdata   prg
11    autodoc         seq
0     ---------------- seq
0     ****games******* seq
0     ---------------- seq
7     astropanic      prg
15    break out       prg
79    private eye     prg
86    slinky          prg
0     ---------------- seq
0     **adv game help* seq
0     ---------------- seq
1     - players help - usr
1     - infocom-zork - usr
58    zork 1.es       seq
26    zork 2.es       seq
45    zork 3.es       seq
6     zork i hints i  prg
15    zork i hints ii prg
1     -  bards tale  - usr
1     - players help - usr
9     bards hints     prg
8     bards tale map  seq
32    bards tale      seq
28    more bards help seq
1     - other game  - usr
1     -     help     - usr
15    hacker hints    seq
```

```
15   littlecompp doc  seq
49   ultima iii edit. prg
5    to kill a thief  seq
30   planetfall.es    seq
16   hitchikers       seq
14   seq file lister  prg
4    boot.data        seq
19   blocks free.

0  icpug ham radio  h1 2a
30   autoboot         prg
11   autodoc          seq
6    printbootdata    prg
8    list me          prg
5    dist & bearing   prg
5    c im products    prg
11   j64 morse r/t    prg
5    air inductance   prg
14   ham formulas     prg
2    decibel calc     prg
5    low passfilter   prg
12   quad antenna     prg
6    yagi             prg
2    dipole ant       prg
3    1/4 wave ant     prg
5    ohms-watts law   prg
36   formulas         prg
7    visicode c64     prg
33   64speedscript    prg
19   64 instr         prg
24   net report       prg
14   morse code       prg
4    dupe 64          prg
33   rtty-c64 rtty-c6 prg
```

```
14   rtty-c64 inst    prg
5    pi network desig prg
28   reg'd supply     prg
5    res. freq 64     prg
19   t.v. satellites  prg
3    mso              prg
33   hamtext          prg
16   mso2             prg
30   test-mso         prg
6    loc. boot        prg
104  loc. v2          prg
9    qsl card         prg
5    dattasette adj   prg
1    hamtext 64 boot  prg
13   copy files.c     prg
4    boot.data        seq
81   blocks free.

0  icpug utilities  u8 2a
30   autoboot         prg
6    printbootdata    prg
11   autodoc          seq
150  edterm demo      prg
5    edterm demo info prg
56   fast rs232.pal   prg
16   file viewer      prg
90   manual.1-2       seq
91   manual.3         seq
96   manual.4-6       seq
44   timemaster       prg
25   wideprint        prg
4    boot.data        seq
26   blocks free.
```

Well thats all for this time, my postbox is open for your library submission.

***

AMIGA PUBLIC DOMAIN PROGRAMS

by Pete Miles

From the letters we receive there is obviously a need to say a bit more about some of the programs than the notes on the catalogue disks. To this end I shall expand these notes on a few of the programs I have used and am using.

Before I start however, a brief resume for new members. The Amiga library was set up two years ago and has expanded alarmingly ever since. We now have well over 1000 programs consisting of about 18000 files. Not all these files are of interest as they are not in themselves useable by the aforementioned keyboard bashers. The source of most of these disks is the USA., especially a chap called Fred Fish, a computing professional from Phoenix, Arizona. This doesn't mean he writes the programs, simply that he collects, collates and generally looks after the largest Amiga library in the USA.

My job is to look after ICPUG's interest in this burgeoning area There are, at present, three distinct libraries: Fish, Amicus and our own ICPUG library. The latter is an attempt to sort programs from other sources into a tighter order. In other words, our disks have all utilities, pictures or sound on one disk rather than being split up all over the place. Right, having said that, to business.

Members ask in which drawer it is best to keep utilities, spelling checkers, text editors etc. There is already a drawer called utilities on the Workbench disk, so there's your answer. However, the problem doesn't end there. Workbench disks have to be all things to all people. Consequently there is an awful lot that can be deleted quite safely. For example, remove all the printer device drivers that you don't use, the calculator, all the irrelevant keyboard maps, the narrator device in the devs drawer and anything else which you won't need. You will gain a lot of space for programs you really want, like Arc.

ARC (ICPUG Disk Comms 2)

Its main aim is to archive and de-archive programs. Simply put, ARC compresses a normal program or file into less space and de-compresses an archived program back to its original state. As a guide you can expect to achieve a compression rate of up to 30%. It can be used for compressing files for onwards transmission via a modem or to fit more on any one floppy disk.

As well as archiving and compressing individual files you can archive various files under one name on one disk. The system is able to recognise these different files so there is no danger of losing their identity.

The options offered by arc are: archiving; de-archiving; adding files to existing archives; deleting archived files; extracting files from within the archive; printing files to the screen or printer (back to that in a minute) listing in short form or long form the contents of an archive. You can have backup retention, so when you delete or add to an archive the program renames the original <something .BAK> for backwards referrals. It also has the ability to recreate archives to recognise the latest compression techniques.

I mentioned printing to screen and printer. One of our members was surprised but pleased to discover that you do not have to de-archive a file before reading it. It is very simple to read an archived program with the facilities provided. Suppose you wanted to read every file with the extension.TXT in an archive called junk.ARC. Just type at the prompt:

```
1>ARC p junk *.txt
```

the p in the command line is one of the many flags you can use for various purposes. To print to the printer:

```
1>ARC p junk *.txt >prn
```

I haven't covered the physical requirements before you start your de-arcing. Format a disk and put it in, say, df1: and the source disk in df0: The current drive must be the receiving drive, NOT the source drive. The command lines would look something like this.

```
1>cd df1:
1>ARC df0: x junk
```

The program will de-archive the file specified and save it to df1: If you don't do this then you will attempt to save to the source disk which may not have enough room. That's about it for ARC. It's well worth having a look at ARCed files, such as those on the Fish disks.

SECTORAMA (Fish disk 108)

With all the ballyhoo of late on the virus and its cousins it might be worth looking at a program that lets you dig about in the guts of others. Before I start this it is as well to warn you that this territory has pitfalls. You'd better know what you doing, because if you don't, you could well zap your program for good. A bit melodramatic perhaps but don't say I didn't warn you. The Topaz 11 font is required, so if you are using something else, don't.

To start it type Sec <device> where <device> is df0:, df1:, dh0:, hd0: or whatever. It currently works with any AmigaDOS device with a block size of 512 bytes. It opens displaying what it thinks is the boot block. At this stage one of the longwords is highlighted. This highlight can be moved around at will, allowing you to look at other longwords. Further data on the block is displayed around the edges of the screen providing information on the cylinder number, block number, file name (if applicable), track number, drive name and unit number etc. It also lists a partial history of the previous ten operations. Not all fields are editable and the author states that some never will be.

The options available are: go to the current sector's parent and the next sector in the hash chain; go to the current block's extension block if possible; go to the header of this data block; compute the checksum for this block; show the results of the last sector search; write the block back to the disk and edit in hex and ASCII. Both edits allow you to write directly to the sector.

Pull-down windows are used to search the entire volume sector by sector for certain criteria: Filenames with wildcards, parent block and header block. You can open a save file on another disk and save the data portion of any sector directly to it. Each write is appended to the last so if the file is totally trashed you can at least recover parts of it.

Computing the Hash function is handy and works thus: you select from the drop-down window a requester that allows you to input a file or directory name. All you have to do is to select 'Jump' to go to the hash chain containing that block and select 'chain' until you get to the entry you want. I'm not going to go into how you zap a virus.

CSH V2.07 (ICPUG Library Utilities 8)

'Shells' are programs that put a friendlier face on the CLI. The one provided with the Amiga leaves something to be desired. One of the most frustrating omissions is the inability to edit the command line. Some shells perform full CLI editing, others allow fast ways of getting from one end of the command line to the other. Another helpful 'everyday-function' is using the arrow keys to recall the last set of commands typed. If you are doing repetitive work then you can cycle through them by pressing the up arrow key followed by Return. Aliasing and defining function keys are short-cut facilities which I have found supremely useful. Aliasing allows the setting of a variable name to perform a specific command. For example, I can load Vizawrite, select df1:, start another CLI and make the morning coffee just by typing VW at the prompt. Similarly if you use a terminal emulator like VT100 you could have an alias that said:

```
alias vt echo Starting VT100;run sys:tools/VT100
```

The screen is printed with Starting VT100 whilst the system goes to sys:tools, wherever that is, and runs VT100. It really is that simple. A similar feature is provided by programming the function keys. However, function keys need a small file created to hold the instructions. If you start up your Amiga and load the DOS CLI then you would type something like Shell login where login is the name of the file. To set up function keys to call specific commands do this:

```
set f1 dir df0:^m
set f2 dir df1:^m
```

The first line will execute dir df0: and get the directory off a disk in df0, whilst the second does a similar action for df1. All done by pressing either f1 or f2. Of course, function key strings can be longer and more complex.

There isn't the space to discuss any program in full including CSH. A resume of the basic functions of the program should whet your appetite sufficiently to encourage you to try it.

1. Command line editing.
2. Shell & AmigaDOS search path support.
3. Simple list of commands available by pressing the help key.
4. Redirection of any command.
5. Piping.
6. Aliases.
7. Variables & embedded variable handling.
8. File name expansion via conventional wildcarding (? and *).
9. Conditionals (if/else etc).
10. Source files (gotos & labels).
11. Many built in commands to generally speed things up.

CSH is another of those programs that benefits from being on your Workbench disk together with a login file set up to do your bidding, alias to save typing and the whole lot initiated from the startup-sequence.

CONMAN (Utilities 8)

This program is similar in essence to CSH in that it is a replacement console handler. However, it does not offer, in my view, such a wide range of commands and facilities. It features the usual up and down arrow command line editing facilities, for example the use of <Ctrl something > to erase a command line or part of one. The differences are chiefly in window handling and the writer's approach to the user's needs. I get the distinct impression that he has written Conman with the programmer in mind as he mentions (in one instance) a bit of C code for making a window, and writing an absolute address of an intuition pointer. Only 4 function keys have been programmed and there is no facility to increase this number or alter the supplied function. F1 shrinks a window to its smallest size, whilst F2 expands the window to its limit. F9 dips the window down the screen to about 1/4 its original position. This is so you can see behind the window. F10 will toggle a window from front to back.

These attributes are fine but not exactly at the top of my wish list. Going back to the window sizing for a minute shows that various intuition options and gadgets may be selected by including a list of attributes after the window title. Something like this:

`CON:10/10/300/100/Behind/nb/` creates a borderless backdrop

`CON:10/10/300/100/Fixed/acm`
creates an active window with a close gadget that won't budge

The various attributes you can use in conjunction with CON: are as follows:

```
A==> Activate(def: no activate)
B==> Backdrop(def: not backdrop)
C==> Close gadget(def: no gadget)(action not implemented)
D==> Depth gadget(def: depth gadget)
M==> Move (drag) gadget(def: drag gadget)
N==> No border(def: border)
R==> Refresh mode(def: Smart Refresh)
S==> Sizing gadget(def: sizing gadget)
Z==> Zero-Zero(def: not gzz)
```

Each attribute serves to toggle the corresponding windows flag, so adding it twice will cancel the effect.

The writer does mention in his notes that there may be some bugs in the system somewhere. That's an honest and not unreasonable assumption as no one has yet written the perfect program (no correspondence please). He does say that rapid toggling between window shrink and zoom will cause the machine to crash. It seems that Intuition provides no method of indicating whether a sizing or moving request is pending, so the dimensions read from the window structure may not be consistent with the actual size.

COMAL DISKS FOR THE CARTRIDGE AND 0.14

by Brian Grainger

The following disks of programs are available from me, subject to the usual conditions. State clearly the title of the disk, particularly whether it is the 0.14 or 2.01 side requested, send a suitable number of disks (one per side), and return postage. Copies will then be dispatched to you.

These disks are from the USA and back up COMAL TODAY issues 16 and 17. No instructions are provided, although usually there are no problems. Refer to me in case of severe difficulties. For each issue, 2 disks are provided. One is for use with the disk based 0.14 version of COMAL. The other for use with the cartridge 2.01 version. There are programs unique for each version as well as some provided for both.

The fast loaders on the 0.14 sides do NOT work outside the USA. You are strongly advised to load COMAL from the fast loading starter disk anyway.

```
------------------------

ct#16 version.14 ga 2a

------------------------

7    boot c64 comal    prg
131  c64 comal 0.14    prg
5    comalerrors       seq
5    ml.fastload-msd   prg
5    ml.sizzle         prg
12   hi                prg
31   menu              prg
35   comal article     seq
8    info.txt          seq
2    names.dat         seq
0    ----------------- usr
0    !comal programs!  usr
0    ----------------- usr
11   2'drive'copier    prg
22   basic2comal-p1    prg
10   basic2comal-p2    prg
9    cubic'spline      prg
8    demo/magicsquare  prg
```

```
16   dirprint'tiny     prg
9    edit'box          prg
3    file'numbers      prg
2    graph'fp'error    prg
32   mad's-alfred'e    prg
6    magic'square      prg
12   read'bytes        prg
8    read'directory    prg
9    see'index         prg
24   shadow'letter1    prg
34   shadow'letter2    prg
4    smart'reader      prg
22   smooth'curve      prg
4    sprite'fun        prg
35   star'trek'db      prg
7    subtract          prg
22   the'15'puzzle     prg
12   uniform'spline    prg
0    ----------------- usr
0    !  data file    ! usr
0    ----------------- usr
```

```
80   ran.startrek      rel
17   read and run.txt  seq
0    ----------------- usr
0    !   function    ! usr
0    ----------------- usr
1    func.graphics'on  seq
0    ----------------- usr
0    !for more info !  usr
0    ! send sase to !  usr
0    ----------------- usr
0    ! comal users   ! usr
0    !  group, usa   ! usr
0    ! 6041 monona   ! usr
0    ! madison, wi   ! usr
0    !    53716      ! usr
0    ----------------- usr
0    !(608)222-4432 !  usr
0    ----------------- usr
4 blocks free.

------------------------

ct#16 version2.0 gb 2a

------------------------

17   hi                prg
0    ----------------- usr
0    !comal programs!  usr
0    ----------------- usr
51   cbase             prg
3    chip.rabbit'test  prg
3    customize'list    prg
14   demo/infomaker    prg
7    demo/magicsquare  prg
17   demo/matrix       prg
6    demo/no'pps       prg
29   demo/screenhelp   prg
13   demo/sorting      prg
24   directory'probe   prg
14   dirprint'tiny     prg
42   disk'editor       prg
100  editor-cai        prg
```

```
28   fast'fourier      prg
2    graph'fp'error    prg
6    magic'square      prg
16   make'dummy'files  prg
39   matrix'calc       prg
17   nim               prg
7    print'using       prg
11   risk'dice         prg
8    see'index         prg
4    shorten'bat'file  prg
4    smart'reader      prg
17   smooth'curve      prg
37   star'trek'db      prg
7    subtract          prg
0    ----------------- usr
0    !   packages    ! usr
0    ----------------- usr
31   pkg.matrix        seq
7    pkg.meta          seq
24   pkg.mlw'sorts     seq
1    pkg.no'pps        seq
17   pkg.screenhelp    seq
4    pkg.text          seq
0    ----------------- usr
0    !  this file    ! usr
0    !requires meta !  usr
0    !  package be   ! usr
0    !linked to use !  usr
0    ----------------- usr
4    1st.tron'w/meta   seq
0    ----------------- usr
0    !  procedures   ! usr
0    ----------------- usr
1    proc.command      seq
3    proc.information  seq
2    proc.merge'text   seq
1    proc.nofont       seq
7    proc.print'using  seq
0    ----------------- usr
0    !  functions    ! usr
```

```
0    ---------------- usr
2    func.cart'color$ seq
8    func.roll'dice   seq
0    ---------------- usr
0    !  data files  ! usr
0    ---------------- usr
2    bat.2drive'keys  seq
1    sample.f-for     seq
1    sample.topr      seq
4    sample.data      rel
0    ---------------- usr
0    !for more info ! usr
0    ! send sase to ! usr
0    ---------------- usr
0    ! comal users  ! usr
0    !  group, usa  ! usr
0    ! 6041 monona  ! usr
0    ! madison, wi  ! usr
0    !    53716     ! usr
0    ---------------- usr
0    !(608)222-4432 ! usr
0    ---------------- usr
1 blocks free.

______________________
td#17-version.14 ha 2a
______________________
7    boot c64 comal   prg
6    slowboot         prg
131  c64 comal 0.14   prg
5    comalerrors      seq
5    ml.fastload-msd  prg
5    ml.sizzle        prg
12   hi               prg
21   menu             prg
2    window-rs232.obj prg
0    ---------------- usr
0    !  comal 0.14  ! usr
0    !   programs   ! usr
0    ---------------- usr
```

```
5    add'practice     prg
35   barometer        prg
3    box              prg
5    calculate'e      prg
10   calculate'pi     prg
13   crystal'ball     prg
3    define'shape     prg
5    demo/1750        prg
6    demo/line'length prg
20   demo/screenhelp  prg
19   direction'game   prg
11   envelope'artist  prg
15   expression       prg
5    fourier'series   prg
5    guess'number     prg
3    hopping          prg
3    invisible        prg
26   polyfit          prg
4    powers'of'2      prg
28   pressure         prg
5    russian'roulette prg
4    sample'rate'calc prg
33   sprite'editor62  prg
8    subtract         prg
4    target           prg
5    target'sighting  prg
1    test'precision   prg
2    test'scope       prg
18   voting'game      prg
7    word'hider       prg
0    ---------------- usr
0    !    epson     ! usr
0    !printer demos ! usr
0    ---------------- usr
2    epson.condensed  prg
2    epson.doublestrk prg
2    epson.elite      prg
2    epson.emphasize  prg
2    epson.expanded   prg
2    epson.exp'italic prg
```

```
3    epson.italic     prg
2    epson.nlq        prg
1    epson.permexpand prg
2    epson.pica       prg
1    epson.printinfo  prg
2    epson.proportion prg
2    epson.sub/super  prg
2    epson.underlined prg
0    ---------------- usr
0    !graphics demos! usr
0    ---------------- usr
26   tv'commercials   prg
23   tv.marquee+      prg
5    tv.bang'bang     prg
2    tv.cue'card      prg
26   tv.second'act    prg
5    tv.finish        prg
0    ---------------- usr
0    !   function   ! usr
0    ---------------- usr
3    peek'hires.func  seq
0    ---------------- usr
0    !  procedure   ! usr
0    ---------------- usr
1    line'length.proc seq
0    ---------------- usr
0    !  data file   ! usr
0    ---------------- usr
3    screenhelp.obj   prg
0    ---------------- usr
0    ! sprite image ! usr
0    !    files     ! usr
0    ---------------- usr
1    imag.'a'         seq
1    imag.'c'         seq
1    imag.'f'         seq
1    imag.'k'         seq
1    imag.'l'         seq
1    imag.'m'         seq
1    imag.'n'         seq
```

```
1    imag.'o'         seq
1    imag.'r'         seq
1    imag.bird'left   seq
1    imag.bird'right  seq
1    imag.boat'left   seq
1    imag.boat'right  seq
1    imag.boy'left    seq
1    imag.boy'right   seq
1    imag.car'left    seq
1    imag.car'right   seq
1    imag.comal today seq
1    imag.dog'left    seq
1    imag.dog'right   seq
1    imag.fish'left   seq
1    imag.fish'right  seq
1    imag.girl'left   seq
1    imag.girl'right  seq
1    imag.plane'left  seq
1    imag.plane'right seq
1    imag.queen       seq
1    imag.rhianon     seq
1    imag.sun         seq
1    imag.target      seq
1    imag.truck'left  seq
1    imag.truck'right seq
0    ---------------- usr
0    !for more info ! usr
0    ! send sase to ! usr
0    ---------------- usr
0    ! comal users  ! usr
0    !  group, usa  ! usr
0    ! 6041 monona  ! usr
0    ! madison, wi  ! usr
0    !    53716     ! usr
0    ---------------- usr
0    !(608)222-4432 ! usr
0    ---------------- usr
6 blocks free.
```

```
-------------------------
td#17-version2.0 hb 2a
-------------------------
17   hi                prg
0    ---------------- usr
0    !  comal 2.0    ! usr
0    !   programs    ! usr
0    ---------------- usr
19   antivoter         prg
30   barometer         prg
16   batch'to'package prg
9    calculate'pi      prg
3    chip.read'text    prg
12   crystal'ball      prg
5    demo/1750         prg
70   draw poker        prg
33   kernal'tutorial   prg
36   makescreen        prg
18   pressure          prg
1    read'printertext prg
5    russian'roulette prg
1    test'precision    prg
3    test'scope        prg
4    set'cursor        prg
14   spin&win'tools    prg
3    spin&win'writer   prg
28   spin'and'win      prg
9    subtract          prg
17   videofilersystem prg
19   voting'game       prg
0    ---------------- usr
0    !   external    ! usr
0    !  procedures   ! usr
0    ---------------- usr
27   ext.correct'file prg
5    ext.directions    prg
11   ext.enter'record prg
22   ext.split'file    prg
38   ext.sub-file      prg
0    ---------------- usr
0    !  procedures  ! usr
0    ---------------- usr
1    proc.nofont       seq
1    proc.print1char   seq
2    proc.set          seq
1    proc.to'file      seq
3    proc.tran         seq
0    ---------------- usr
0    ! source code   ! usr
0    ---------------- usr
8    src.customdump    seq
15   src.gemini        seq
60   src.printer       seq
0    ---------------- usr
0    !   packages    ! usr
0    ---------------- usr
2    pkg.cleanup       seq
28   pkg.gemini        seq
0    ---------------- usr
0    !  data files   ! usr
0    ---------------- usr
1    bat.set'font      seq
1    dat.main'video    seq
2    dat.states        seq
36   hrg.poker         seq
6    scrn.makehelp     seq
20   txt.printer pack seq
0    ---------------- usr
0    !for more info  ! usr
0    ! send sase to  ! usr
0    ---------------- usr
0    ! comal users   ! usr
0    !  group, usa   ! usr
0    ! 6041 monona   ! usr
0    ! madison, wi   ! usr
0    !    53716      ! usr
0    ---------------- usr
0    !(608)222-4432  ! usr
0    ---------------- usr
2 blocks free.
```

LAN COMPUTER SYSTEMS

1063 High Road, Chadwell Heath, Romford,
Essex, RM6 4AU Telephone: 01-597 8851

Philips 8833	£209.00 + VAT
1084 Monitor	£189.00 + VAT
A500	£309.00 + VAT
PC1	£259.00 + VAT
A501 RAM Expansion	£99.00 incl. VAT
Cumuna 2nd Drive	£89.00 incl. VAT
Cumuna Drive with on/off switch	£99.00 incl. VAT
B2000	£849.00
XT Board	£299.00
2052 2MB RAM Board	£299.00
2090 Controller	£349.00
51/4 Drive	£114.00 incl. VAT
Lansoft Membership	£10.00

Special introductory offer to ICPUG members:

Okimate 20	£129.00 incl. VAT

Special LAN offer:

CB64 Yamaha Keyboard Walkman and music cassette to ICPUG members	£189.85

DISCOUNT CORNER

by John Bickerstaff

Refer to page 92 in the Jan/Feb issue for General Information - including when you can contact me on the 'phone. For Other Discount Facilities please refer to pages 92-6 in the same issue, pages 225-6 Mar/Apr, and 362-3 May/Jun.

Look at this edition's items. Facilities sometimes change between issues.

CBM Hardware is available to members at discount rates. Call for details. There have been considerable reductions in the PC range recently. The PC1 is cheaper than an Amster!

A1 Computer Supplies of 58 London Road, Leicester LE2 0QD, phone Leicester (0533) 550015 are providers of computer supplies including disks both 5.25 and 3.5" diameter. This company was at the 11th Commodore Show last month and sold some bulk 3.5" disks to several members of the committee. These disks were said to have originated from the factory that supply Sony and three other major Japananese companies who market branded disks. So far these disks have proved very satisfactory and can therefore, based on our present findings, be recommended for use by members. This is not to say that other suppliers cannot provide disks of equal quality.

Bitstream Publications new address is 68 Cowley Road, Littlemore, Oxford, Oxon OX4 1JB. If you still have matters outstanding then please try this new address.

Camilla Software of The Hawthorns, Great Bromley, Colchester, Essex CO7 7JN have a special members offer on their Dialtext program. It is available in three editions: V1 for CBM modem or OEL comms pack; V2 for the 64 Multi-modem or OEL pack; and V3 for the Mustang cartridge. The normal mail order price for any edition is £13.50 including postage but only £10.50 to ICPUG members quoting their current membership number. The Mustang cartridge needs a modification to work with the Prism 2000 which can be supplied in an extension lead, normally £3.00, only £2.50 to members. A strap needs to be cut in the Prism 2000 modem but this is said not to be difficult. You can download the manual free from Micronet. Please note that the software only comes on disk, NOT cassette. This offer is cheaper than downloading from Micronet!

LAN Computer Systems Ltd still have at the time of writing this article stock of the PC1 at £259.00 plus VAT to members. They also have in stock Cumana external disk drives with a switch on the front to enable turning it off without removing the cable at £99.00 including VAT.

LOAD IT is still available from Mills Associates but only in kit form, they no longer have the facility to modify your unit at their plant. Please contact the Sales Manager and quote your current membership number. The telephone number is 0600-4611.

Systems Software Oxford Ltd have ceased to supply their various products in the UK. However, there is a source for these which is: HTH PC Services of 5 Elm Grove, Brize Norton, Oxon, OX8 3NE. Prices are £7.95 for 128 version of Oxford Pascal or £6.95 for the 64 each on disk, or £3.95 for the 64 only on tape. Hack Pack for the 128 is £7.95 on disk, Oxford Basic for the 64 is £5.95 on disk and PETSPEED for the 64 is £4.95 on disk. All prices include postage. Please make your cheques out to H.S. Haslam, you may deduct 50P if you order more than one item at one time.

Transactor (UK) Ltd are printing the third edition of Transactor for the Amiga which is understood to have some UK sourced articles. It is available to members at £2.50 per issue - yes only £2.50. My apologies for my mistake in advising you that the price was £3.50 in the last issue. The Transactor can be obtained directly from Unit 2, Langdale Grove, Bingham, Notts, contact Dave Beatty whose phone number is 0949-39380. It is only £2.50 per issue.

COMPUNET discount pages - GOTO 326989
MICRONET discount pages 81021324.

⁂

Last-Minute For Sale/Wanted

OFORD PASCAL 128 - as new £12. The Music System (64/128) £ - as new £6. LOGO (64) £4. Colossus Chess (64) 4£. Unused 64/128 Datasette - £10. All software for £23 or everything for £30.00 +P&P. Tel 01-981 0262 (H eves) 01-326 3135 (W). R Roberts, 1 Lewey House, Joseph St., Bow, London E3 4HN.

⁂

BACK ISSUES

Back Issues of the ICPUG Newsletter are available from Jack Cohen (address inside front cover). Prices (and availability) of back issues are listed below. Prices include P&P in the UK.

1987 Volume 9 (1-6) - £1.50 each
1986 Volume 8 (5-6) - £1.50 each
1985 Volume 7 (1-6) - £1.00 each
1984 Volume 6 (1-6) - £1.00 each
1983 Volume 5 (1-6) - £1.00
1982 Volume 4 (1-6) - £0.65
1981 Volume 3 (1-6) - £0.50

1987 (VOLUME 9, 1-6)

REGULARS: hints & tips, news, previews, applications, programming, bugs and updates. JIM'S JOTTINGS (Jim Kennedy) Commodore news, computer views. AMIGA WATCH (Mike Todd) The eye in Amiga. PERILS OF PORTIA (Brian Grainger) and her sisters. SUPER* CORNER (Jim Kennedy) Precision products. TEXAS TALES (Betty Clay) Southfork soap. NETWORK NEWS (Brian Grainger) Compunet, Micronet, Fishnets. MIKE'S MEANDERINGS (Mike Todd) All on his Todd. COMAL CORNER (Brian Grainger) Thinking man's BASIC.

GENERAL Features: introduction to COMAL (1); Compunet (2); disabled computer users (3); DIY printer cable (3); COMAL standardisation meeting (4 & 6); the future of microcomputing (4); languages (4); The automated office (5); Illegal Opcodes (5); 1986 Index (1)

Reviews: Star NL10 (1); SFD-1001 (2); Commodore 500/600/7000 (3); Psion organiser (4); MPS-803 descenders ROM (5)

Programming/applications: logical operators (1); 1520 newsletter (2); changing print wheels on the DPS1101 (3); perils of CBM/IBM conversion (3); Forth (3); C64/128 to Amiga conversion (5)

PET Features: PET upgrade (3); keyboard re-conditioning (3)

Programming/applications: Data Transfer from to PC (2); PET talks to PC (2); Amiga emulator (6)

64 Features: design and history of the 64 (1)

Reviews: Vizastar (1); The Last One (1); Swift spreadsheet (1); Little Computer People (2); Sideways (2); Turbo-ROM (2); Dimension printer buffer (2); Tasword (2); GEOS extras (3); Dolphin DOS (3); Mini-Office II (5); Artist 64 and NEOS (5); Universal Interface (6); Phantom (6); Load-It (6)

Programming/applications: autosave (1); EasyScript disk directory (2); automenu (2); cold/warm starts (2); using IEEE with COMAL (2); GEOS overview (1); GEOS update (2); Superbase duplicate keys (4); Superscript and DPS1101 (4); Superbase: direct data reading (5); Superscript: custom defaults (5); C64/MPS1000 (5); Superbase: multi-key access (6)

PLUS4 Features: Plus4 views (4)

Programming/applications: converting files to 3+1 (1)

128 Features: Music (6)

Programming/applications: 80-column tv display (1); permanent screen messages (1); accounts with Superscript (3); 1571 problems (3); Pascal (3); Vizaspell hints (6)

Reviews: Pocket Writer (1); Commodore 128 Companion (1); VizaWrite Classic (2); Dolphin DOS (3); Big Blue Reader (4); 128 books (4)

AMIGA Features: Buying an Amiga (1); single drive systems (1); Amiga at Hanover (2); a history (6); A500 the American plan (6)

Programming/application: using the MPS1000 (1); using printers (1); CLI notes (2); customised WorkBench (4); Amiga codes (4); the Guru strikes back (4); keyboard layouts (5); 80 column text in BASIC (5)

Reviews: the new Amigas - a first look (2); Modula-2 (2); Butcher (3); Jumpdisk (3); RubyComm (3); Analyze! (5); Amiga 2000 (5); WordPerfect (6); Butcher V2 (6)

READERS WRITE . . .

This letters section is the largest ever, so thanks to those who sent in disks, making our life a little easier. A variety of topics have been covered, and we hope to see articles following up these subjects in the future. Feel free to send us copies of your replies to published letters. See the Super* column for more letters. See "The Next Solution" for replies to JR Bromfield's letters. PH

AMIGA - THE FIRST INSTALLMENT

Mike Archer of 29 Holbeck Avenue, Marton, Blackpool FY4 4LS writes: On page 22 of the Jan/Feb issue, it states that it is not possible to use the INSTALL command on a one drive Amiga system. If you type INSTALL ? the command is loaded and it prompts you to enter the parameters. Insert the disk, type DF0: and it will be installed.

DON'T ASK ME

S Roddie of 379 Tessall Lane, Northfield, Birmingham B31 5ET: What does the AmigaDos ASK command do? I found it in the C: directory on my 500 system?

- Brian Grainger answers that in Bits Bytes and Words. BB

DRIVING OVER THE BRIDGE

John Hildersley of 45 Parker Street, Watford, WD2 5EY writes in response to the Chairman's comments on 3.5" drives and MS/DOS compatibility (see Vol 10, No 3, Page 256): I have a PCML manufactured third party drive which reads, writes and formats 720K disks. Connect the drive to the Bridge Board at power up and alter the PC config.sys file to include DRIVPARM=/d:01. This should work with all third party compatible drives.

- See this issue's Chairman's Chatter for further details.

IT'S A HARD DEAL

Duncan Allan of the Sierra Bernia School, Alfaz del Pl, Alicante, Spain writes: I have a PC and an Amiga 2000 linked to a Centronics PP8. Can anyone recommend the best way to set up a hard card on the Amiga? Are there any problems making efficient use of the partition?

SHIMMERING SHADES OF SHINING SHADOWS

Norman Stone of 64 Sandford Road, Chelmsford, Essex CM2 6DQ writes: When using Deluxe Paint II, click with the left hand mouse button on either the foreground or background colour indicator. Now press 1, 2, 4, 5, 7 or 8 on the numeric keypad. The colour selected changes shades a little bit at a time. I am using the new Star colour printer which is very good. The ICPUG Magazine is getting better each time. Well done!

GENEALOGY

J F Hutcheon of 4 Rural Way, Streatham, London SW16 6PF writes: I use Superbase 64 to manage my family tree. Are there any programs to help me?

Alan Carcas of 59 Cornmill Lane, Liversedge, West Yorks WF15 7DZ writes: The comments in Super* Corner regarding genealogy interest me. I have become an addict since meeting a distant cousin very much into family trees. Wishing to record all the info he has on disk, I contacted Rex tester among others and they have supplied me with a version of Gentree. Unfortunately it is for the C128 which I cannot read. I hope to set up a system soon. Does anybody know of a program that is available to us PETmen?

- There is certainly a lot of interest in Genealogy. I have reviewed Ezitree by Rex Toomey for this issue and last year's issues were full of letters on the subject. Isn't it time that someone started a column? PH

KNIGHTS IN SHINING ARMOUR

Alan Carcan: As a minority group member (PET), I will defend ICPUG's honour. I read the whole magazine whatever the article. I don't pretend to understand it all but I try to relate as much as I can to my own know ledge (or lack of it) of computing. The next issue can never come round fast enough. There is not much for us PET owners but I have learnt a lot over the past three years. Full marks to all respsonsible in ICPUG. Like they used to say about Little Liver pills, worth a guinea a box, or whatever the new subscription is going to be!

S Roddie: I joined ICPUG to glean more information about the Amiga 500 take advantage of discounts, use the libraries, and keep up with Commodore developments. It is a shame that people bemoan the coverage the Amiga receives. The majority of unrest is caused by people who believe their machines will be superseded overnight. I bought an Amiga to work with digitisers, genlocks etc. If all us Commodore owners can't get along, who can we get along with?

T E Nuttall of 43 Renshaw Drive, Bury, Lancs BL9 7NJ writes: I feel I must jump to ICPUG's defence. I have saved myself considerably more than a year's subscription by taking advantage of discounts. The club exists to provide mutual benefit for all members. If Mr Baber wishes to see articles on the PLUS/4 then why does he not write some? After all, authors are not paid for their efforts; nor are they charged for the privilege of seeing their name in print.

CHOP! CHOP! WHO'S THERE?

A 'Nonny' Muss of 31 Selby Walk, Popley, Basingstoke, Hampshire RG24 9EE writes: I received the ICPUG Magazine this morning, postmarked 22 June. So why did it have information about the forthcoming Commodore Show on 3-5 June? Surely if this information is to be of any use, it should be sent out before the event rather than after! Apart from that little moan I would like to congratulate you on an excellent magazine that I thoroughly enjoyed reading.

- The Head Ed lowers his blushing neck to the block. PH

GENERAL UNREST

Michael Clarke of 27 Giles Coppice, Upper Norwood, London SE19 1XF writes: It seems that ICPUG consists of a small number of 'Generals' who unselfishly devote a lot of their time to running the club, producing the magazine, copying disks etc; and a considerably larger number of 'Privates' who contribute neither time nor effort to any club activity. To create a much more cohesive whole, I suggest that (1) all members should be able to obtain a disk of membership records to enable members with similar interests to make contact with each other; (2) members intending purchases should advise a co-ordinator who will then advise them on the suitability of the software, perhaps arranging a demonstration of the software by another member; (3) the magazine could be smaller but published monthly so that it would be more topical and up to date. I would not object to a subscription increase to cover the cost; (4) all members should be involved in the Beta-testing of new software.

- These are interesting questions to which we offer the following: (1) This may contravene the Data Protection Act. However, this issue sees the launch of a Penpal Special Interest Group. (2) Members wishing to see software in action should either join or start a local user group. (3) It could indeed, but who's going to do all the work? (4) Alpha-testing is carried out by the programmers; Beta-testing by experienced testers; Gamma-testing by the general public who buy the first release. PH/BB

THROUGH THICK AND THIN

J Bradley of 7 Sweethill Terrace, Coatbridge, Lanarkshire ML5 4ST writes: Why not increase the magazine size to A4? This would decrease the thickness and number of pages. Most articles would also cover less pages.

- Producing the magazine on A4 would complicate layout and printing procedures. A thick A5 booklet format is also longer lasting. BB

NO-VIC-E USER?

Roger North of 5 Chandlers Close, W. Mersea, Colchester CO5 8DY writes: The articles are interesting but way above my head. Don't forget us folk on the bottom rung of the computing ladder. VIC20s are rarely mentioned though there are more users than PC, PLUS/4, C16 and 700. Perhaps we can start a section with the emphasis on BASIC programming and using the hardware. I am trying to obtain a copy of Intro to BASIC (2). Can anybody help?

INDEX LINKED

A C Montgomery of 2 Walnut Close, Thornbury, Bristol BS12 1BS writes: I frequently refer to back issues of the Magazine and sometimes find it difficult to trace a half-remembered article or comment. Apart from Tim Arnot's selective back issues index published in 1986 there does not seem to be an annual index earlier than 1984. Would there be membership support for the indexing of 1979-83 issues on disk as part of the libraries? I would be prepared to help.

MISSED THE BOAT

Paul Traynor of 164 Gorsey Lane, Warrington, Cheshire writes: Would you consider printing an article about the Star LC-10C printer in the Newsletter or are you strictly Commodore products only?

CATCHING THE BOAT

P J Dean of 92 Priestly Way, Middleton-On-Sea, West Sussex PO22 GRR writes: Are you interested in a review of Compute!'s AmigaDOS Ref Guide?

- An annual index of previous years would certainly be useful. Mr Traynor has unfortunately missed the boat as a review appears this issue. There is no need to ask permission to submit a review. We welcome all member's contributions on any subject. See my article on page 304, vol 10, no 3. BB

PRINTER QUERIES

Giorgio Grassi, CP842, I-43100 Bologna C, Italy writes: I use C128 Superscript. How can you switch to NLQ mode directly with a Riteman C+ in software?

Valerie Elliott of 36 Marston Crescent, Countesthorpe, Leicester, LE8 3PY writes: I am having trouble using the SG10 Star printer together with Superscript although it works fine with Microclerk. Can anybody help?

John Marchant of 43 Bowhill, Putnoe, Bedford MK41 8EQ writes: I use Superscript 64 with a Citizen 120D dot-matrix printer and a Commodore interface. The 'italics off' command does not work as I expect when used in conjunction with quotes. Instead I get a reversed left-hand square bracket followed by the ASCII character I send to the printer. Can anyone suggest a reason for this?

Peter Blair of Garthend, Annasgarth Close, Harmby, Leyburn, North Yorkshire DL8 5PL writes: I obtained a replacement interface to connect my Star NL-10 to my Amiga 500 and use with ProWrite (version 2.0). After experimentation with the print density setting and page set-up I arrived at a suitable print quality in graphic mode which is not bad for a 9-pin printer. However, ProWrite does not print more than one sheet correctly and I have to print a five page document as five separate runs. In addition, some of the vertical lines in the characters seem to be printed twice, thickening them up. ProWrite does not let me send the printer code to set the page length to 70 lines per page so I cannot print multiple sheets in one run as I must reset the top of form after each sheet. I have written to the distributors 'New Horizons Software' in Texas to no avail. Although ProWrite is beautifully simple to use, I find these problems frustrating.

Peter Dobson of Hartside, Back Lane, Bucks Horn Oak, Farnham, Surrey GU10 4LW writes: With Scribble! is there any way of stopping the output to printer once it has started if a printer is not available? Has anyone figured out how to use the soft keyboards in Workbench 1.2 with Scribble!? Or indeed has anybody managed to delete those ghastly American spellings from the dictionary.

Nick Allison of 24 Thames Gardens, Efford, Plymouth PL3 6HD writes: I use a C64/1541 with Sprinter 128 and a Seikosha SP-1200AI printer with Superbase 64 Version 1.0 and I cannot for the life of me get it to print. I have no problems using the same equipment with other software. Can anybody help?

STAR SOLUTIONS

Rob Pepper of Star Micronics UK Ltd, Craven House, 40 Uxbridge Road, Ealing, London W5 2BS writes: (See Vol 10, No 2, Page 231) Mike Leach suggestion that the Star LC10 printer with version 1.2 firmware would not produce any form of bold or emphasized print in NLQ mode is unfortunately incorrect. The Star LC10 will produce double-strike NLQ, double-strike being preferentially supported as mentioned on page 58 of the LC10 Users Manual and there is no need for a firmware upgrade. The following program illustrates this:

```
10 LPRINT CHR$(27);x1;
20 LPRINT This line is in ordinary NLQ
30 LPRINT CHR$(27);G;
40 LPRINT This line is in double-striek NLQ
50 LPRINT CHR$(27);H;CHR$(27);x0
```

- This letter just missed last issue's deadline. Thanks to Rob Pepper of Star Micronics UK Ltd for this information. Other companies please take note! BB

GET KNITTED!

Norman Stone again: My wife is very interested in the article on knitting and computers by Charles Hooker. She is looking at a way to use a computer to design clothes patterns etc. More information please!

Peter Lovey of 1 Ingleby Road, Sawley, Long Eaton, NG10 3DG writes: My wife owns the Jones-Brother KH910. Is this the same make? What paper and printer do you use? Using a C64 and Star LC printer I print the graphic out and then transpose it onto the correct Mila sheet for the knitting machine.

● My wife uses a double-bed Singer Memo-matic 2310. She is not up to date with the numerous model and number changes of the Japanese machines and cannot comment on whether the KH910 or 950 is comparable to hers. The most suitable weight of paper for the Singer is 40/45gsm. She can feed a computer design into the 2310 producing a 180 stitch wide single design. We use an Epson LQ800. Charles Hooker

ROYAL TIPS
M J Kingsley of 26 Russell Court, Ross Road, Wallington, Surrey SM6 8QS replies to Robert Parr's letter (see Vol 10, No 2, Page 229):To produce graphics to the standard of the examples in the Print Shop Disk, read the Graphics Editor section of the Ref Manual. Practise in the Graphics Edit Mode, alter some examples and then print out the results. To produce your own graphics, place a piece of tracing paper over a picture. Draw a 44 by 45 grid over the traced area and number the squares 0-43 and 0-44. Fill in any squares with part of the picture showing through. Transfer the grid to the Graphics Editor Screen and print it out. However, I do not know how to get the pound sign either!

OUT OF SEQUENCE
W G C Austin of 33 Slingsby Gardens, Cochrane Park, Newcastle upon Tyne NE7 7RX writes: Does anybody know how to convert Vizawrite (CBM64) files into sequential files? I am trying to standardize the enormous number of files into one format so I can use one WP. I can also transfer CBM sequential files across to my PC, but I have problems with PRG files.

WHATEVER THE WEATHER
Keith Dutton of Fjeldehagen 66, 4046 Hafrsfjord, Norway writes: I have a CBM SX64 and an Amiga 2000 with hard disk. I also have a 1.2 metre WSD remote control satellite receiving dish (not a lot else to do, especially in the winter!). I see from the latest Maplin catalogue that one can get software to receive and decode my own weather satellite pictures on certain (non-Amiga) computers. Does anybody have any information or software which runs on the Amiga?

And Peter Dobson again: I would be interested to hear from any Amiga users who have developed programs for decoding/disseminating standard APT weather satellite data or indeed programs used for orbit and pass prediction times of low Earth orbit satellites. I have been developing an Amiga compatible interface to read the APT data but am having trouble with software. Any offers?

WHY TWO MODEMS?
J A Bailey of 214 Moor Lane, Cranham, Upminster, Essex RM14 1HQ writes: As a disabled member, I cannot always get out to see my family and friends. We have often thought of communicating by modem, and have tried Compunet but found them both too expensive. We have some modems, and I was interested to read about Y2's User-2-User software. More information please.

● Contact Y2, 111 St Albans Road, Watford, WD1 1RD, 0923-50161. See Discount Corner (especially No 1 of each year) for latest info and prices. PH

DOUBLE YOU ACHE SMITH
Tony Wright of 3 Algarth Rise, Stockton Lane, York YO3 0HD warns: I write to warn readers of the dire results of joining the Home Computer Club (a W H Smith subsidiary). I have received unrequested software and cassettes instead of disks. Once I was sent a faulty piece of software and on returning it I was informed they could not replace it as it was out of stock, despite the fact that the software was still on the market. I have been struggling for months to recover postage spent on returning unordered or faulty goods to no avail. Writing to the Club elicits responses little or nothing to do with the content of my letters. I wouldn't touch them with a barge pole!

THE SWEET SCENT O' SCOTLAND
S Roddie again: Bouquet time! I have received excellent service from the Amiga Centre Scotland. Despite my wariness of mail order firms, I placed some orders after seeing them mentioned in your pages. I am delighted to say that the items arrived in a week. I also ordered Photon Paint (10% ICPUG discount) in advance of its release. I am now using it. Thank you to ICPUG for providing an unbiased forum where people with a variety of machines can get together and exchange information. I only wish I had joined sooner!

HARD WEARING BOOKS
Adrian Stone of 47 Oakford Villas, North Molton, South Molton, N Devon, EX36 3HJ writes: I am interested in finding some books on hardware repair and electronic projects. Can anybody help?

OUT OF ORDER
A J Willis of Loirston, 23b South Guildry Street, Elgin, Moray IV30 1QN writes: I am interested in machine code programming and have had difficulty obtaining recommended books for the C64. Please advise me of some suitable titles on the subject. I am also interested in books on Intel 8080 programming as I hope to go on to writing small routines for the C128 in CP/M mode.

● Contact Computer Manuals on 021-706 6000. Maplin (catalogue available from WH Smiths) can supply a variety of books on electronic projects. PH

DEATH WISH
John Austin of 20 Tivoli Park Avenue, Margate, Kent CT9 5TH writes: Am I the only one who has not had the dreaded Virus? I have a suicidal urge to experience it. This is The Lemming signing off!

SUPERBRAIN BOX
A C Montgomery again: Has any member experienced a C64 apparently 'forgetting' that a device 9 drive is connected when using a Brain Boxes interface and an 8250LP? I have suffered this many times when using Superbase 64 version 2, which returns an error code A. If I am trying to initiate a disk read or write it is possible to recover by using the database command, but if I get the database prompt then I can only recover by switching to a different database on the default device 8 and then using the database command to switch back to device 9. The problem also occurs sometimes during various file transfer or printing operations when the whole system hangs up with open files on the

drive. Switching off and reloading seems to be the only solution. Any ideas or suggestions? My equipment may be faulty, but all else appears to be all right.

RECORD TRANSFER FEE

N J Davis of 30 Edenham Crescent, Reading, Berkshire RG1 6HU writes: I am interested in the Brainboxes interface to transfer data between Commodore machines. My firm currently uses a C128 and 1570 drive to operate a plotter and I am upgrading the software to run on the Amiga 500. I require a safe way to transfer the data files across to the new machine.

N Kitcher of Pear Tree Bungalow, Rowes Lane, East End, Lymington SO41 5SO writes: I would be interested in the Brainboxes interface if it allows me to use a 1541 and DPS1101 with a C500 (the PET machine with a parallel IEEE). I think £90 is a bit expensive. It should also require no driving software. I believe that their serial/parallel interface uses 4K of memory.

P J Richards of 77 Sidney St, Folkestone, Kent CT19 6HG writes: The proposed new Brainboxes interface sounds interesting and if it covers the PET, C128, Amiga, SX64, 1541 and 8250 drives.

TAKING STOCK

Bill Temple of Primrose Cottage, Hannay Road, Steventon, Oxon OX13 6AP writes: Is anybody seriously interested in stocks and shares? I have written a program on the C128 to handle S&S data and I have been using it for the past two years. I am thinking of writing a manual so that others can use it.

GAMES?

No, thank you! Please include reviews of business software, utilities etc., even business-type simulations but no games, please. (AC Montgomery)

I joined ICPUG last year on the basis that it was for the more serious user. The ICPUG Mag has surpassed my expectations. Don't turn it into a zap, bang wallop type of magazine which caters for games players. (K C Rushby, Groby)

A brilliant idea! Other magazines review any old trash on the market. As a teenager I enjoy the occasional trip into oblivion with my trusty Quickshot at my side, even though I use my computer mainly for WP and programming. I applaud the idea, providing we only review the best games. How about an adventure help line for those who lack the imagination to solve the abstract riddles set by the more psychotic programmers? (Alan Lush, Southampton)

I am not a 'stick in the mud' (I like a good alien blasting session now and again) but most games are here today and gone tomorrow. I would find it frustrating to see space devoted to a games review which I might read once, whereas I might read a wordprocessor or spreadsheet review several times. I think games are adequately covered in other magazines. (P K Haydon, Walsall)

I do not think you should include games reviews in the magazine. There are plenty of games magazines already. (Paul Traynor, Warrington)

Don't you dare have games reviews in the ICPUG Magazine! There's plenty of review mags - please stick to real uses of computers! (Peter Allaway, Royston)

Don't let the ICPUG Magazine go down the slippery road to obscurity. More and more games, just like the virus, will creep into the magazine until it becomes no more than a comic. ICPUG is remarkable value for money. Experienced articles, interesting reviews, tips and hints, and above all a professional approach to the hobbyist. Include games reviews as an extra, if you must, and not as a substitute for other articles. (John Austin, Margate)

NO! I joined ICPUG to get away from mags with just games, games, games. I use my computer to write up study course notes and I have built a Pak so I can control motors, robots and mains operated devices. As a radio enthusiast, I use my computer to decode morse code and RTTY from a communications receiver and I use it for subscriptions, newsletters etc. at my local radio club. I am interested in the technical side of computers and not games. I hope that you will not start an alien invasion! (Adrian Stone, South Molton)

Please, NO games reviews (F C Russell, London)

I plead with you not to include games reviews in the ICPUG Magazine. If I want games I will buy games mags, so please keep your excellent journal full of unique and useful information. (Steven Gibson, Derby)

A definite NO to games reviews. I have seen too many good magazines start on this slippery slope. The ICPUG Magazine is one of the very few left that is worth reading. (P J Richards, Folkestone)

How the months fly by! Hardly a blink of the eye and already the next ICPUG magazine has landed on my doormat. I the magazine and membership is good value for money, even though I confess to being a PLUS/4 owner. Well, someone had to buy one! If I want games reviews, I'll buy any one of the games magazines. Even the so called dedicated user mags seem packed with reviews on how to become 'A Dragon-slaying, maiden-saving, alien-blasting, fighter-pilot-who-does-BMX-tricks-in-his-spare-time super hero!! In the early days of my computing, I needed an unbiased sensible journal, ie the ICPUG Magazine. Despite having little of direct relevance to my computer, it keeps me up to date with what I might need to know in the future. Please no games reviews. It's a unique journal, let's keep it that way! (Simon Hiscocks, Penarth)

I have decided to break with tradition to write to the ICPUG Magazine! I certainly would hate to see games reviews in any shape or form in the Magazine. The sort of reviews that grab my attention are reviews of utilities, hardware, add-ons, anything in fact which makes my hard worked C128 easier and more pleasurable to use. (Gilbert Anderson, London)

The answer has got to be NO! Let's stick to the more technical articles. How about some tutorials for Small-C, Micro Cobol & JRT Pascal? (Cyril Slip, Leeds)

I would like to see games reviews, but if it meant sliding down the slippery slope like so many other mags, then NO! (P J Dean, Middleton-on-Sea)

No, I would not like to see games reviews. Perhaps I am prejudiced as a non-games player, but experience has shown that such reviews would eventually take over. Congratulations on an excellent organisation and a splendid magazine - in its present format. (M R Flitcroft, Campbeltown)

FOR SALE & WANTED (AND FOR FREE)

Send small adverts to Peter Hauke (address inside front cover)

Many thanks to those who took the trouble to send in their adverts on disk (PETSCII, no imbedded codes please). The 36p expenditure was much appreciated. Overall, the adverts took me a whole morning to read, decipher and type in. Next time I won't be deciphering any illegible or "wordy" ads. Please use large block capitals, with lines double-spaced, if you must write. Construct adverts in the house style, as they appear in below. PH

For Sale

PRINTER INTERFACES for the C64/128: Xetec Supergraphix with 8K buffer and downloadable fonts and Micrographix MW350 £30 each. C2N Data Cassette Recorder £18. Terry Hart, 17 Burns Gardens, Lincoln. Home tel: 0522 29643, work: 55222 x4019

ANADEX DP-9501 printer £150. Datassette C2N £25. C64 EPROM prgrmr £45. C64 Simply Write £80. C64 Disk Surgeon £15. dBase II for C128 (CP/M) £80. Books: dBase II for Every Business £10; Report Writing in dBase II £8; assorted CBM & CP/M books £6 each; assorted service manuals £5 each. Program and h/ware to enable any IMB/PC compatible computer to print to any printer £35. All ono. Phone Dick Wickenden (0582) 662375 after 7pm eves or anytime w/e

C128/1571/Datasette, only one year old inc Freeze Machine MK V & Laser II, magazines and book. Total cost £1100. Sell for £400 ono. Buyer to collect. Mike Lowey, 51 Dymokes Way, Hoddesdon, Herts EN11 9NA. Tel: (0992) 466989 after 7.30 pm

VIZAWRITE Classic 128 & Vizastar 128 & printer lead £50. Petspeed 128 £5. Hackpack 128 £5. Graphic expander 128 £3. 128 Programmers Ref guide (Bantam) 310. CBM 128 Personal Computer Book £2. Anatomy of 1571 Disk Drive £2. All the above for £60. Also C64 games software and C64 books. Contact Dave on 0309 30926 eves & w/e

MPS 801 Printer in perfect condition, offers please. Busicalc 3 for C64 £35. Instant Recall £13. Flight Simulator II £20. Acrojet £6. Also C16 and PLUS/4 games. Contact Job Chithalan, 45 Blenheim Court, New Church Road, Hove, Sussex BN3 4AJ

AMIGA 500 with disks and manual including AmigaDos manual for £450 ono. Contact Steve Wilson, Day: 061-998 2500, After 7pm: 0942 55321

C64 EMULATOR (Readysoft) for A500/2000 including serial i/face £35. Phone 01-653 4314 eves

C64 Books covering graphics, sound, tricks & tips & machine language. 8 books for £15. Amiga games: Defender of the Crown, Karate Kid 2, Goldrunner £10 each. Starglider £15.00. Deluxe Paint £25. All inc p&p. Gary Sims, 8 Nunnery Avenue, Rothwell, Northants, NN14 2JJ. Tel (0536) 711724 eves & w/e

1570 £75 ono. 1541 with external 8/9 switch and quiet stop £50 ono. MPS801 printer fitted with multifont ROM (four typestyles, true descenders) £60. All in working order with cables and manuals and all inc p&p. Chris Ansell, 6 Woodland Road, Sawston, Cambridge CB2 4DU

C16/PLUS 4 software. Send SAE for big list. KS Rogers, 57 Fircroft Close, Tilehurst, Reading RG3 6LJ

128D with lots of C64 software plus games paddles and 2 joysticks (Euromax Pro). Hardly used. £230 no offers. Phone Barry Brackett on (0732) 847965 (Kent)

C16 with 64K RAM, datasette, 1551 disk drive, 2 joysticks and 10 games. £120 ono (plus p&p, about £10). Write to B Piret, 80 rue de Viville, 6700 ARLON, Belgium

64 Emulator £30 (upgrade with serial interface). Exelerator Plus 5 1/4" drive, plus a few blank disks, GEOS and Video Title Shop £50. Deluxe Productions £80. Contact W P Woodrow, 1 Paget Terrace, Penarth, S Glamorgan, CF6 1DR

MPS1000 (Epson LX80) printer, only 7 months old, inc serial & parallel interfaces, manual, original packing for £149. Anatomy of a 1571 £6. 1530 Datasette £15. C128 Programmers Reference Manual £10. Robtek C64 gamekiller cartridge £3. Contact Ken Buckmaster, Maidenhead, Berks on 0628 74034

MPS801 printer £60. Easy Script, Easy Calc, Easy File (all disk) £25. Or £75 the lot. Keith, tel : 0245 328086 (Chelmsford) eves & w/e

C64 software on tape - ACOS+, FASSEM 2 pass assembler/disassembler/extended Basic, plus 13 popular games incl. Hobbit, F15 Strike Eagle, Ghostbusters, Decathalon, Zaxxon. £20. Keith, tel: 0245 328086 (Chelmsford) eves & w/e

C128D with fixit ROM £200, monitor £50, 512K RAM £100, FM Sound expander with keyboard £35, C128 £150, 1570 £110, Freeze Machine £18, Final Cartridge £20, Superscript 128, Micro Clerk, CBM Modem, sound digitizer, motherboard, mouse, 1520 printer/plotter, original tapes, Super C, Basic Compiler 128, Swift 128, Geos 64, CP/M plus manuals, Graphic Expander 128, C128 books. Offers - Nick White on Peterborough (0733) 46814 day, (0733) 68674 eves & w/e

For Free

FREE MANUALS: two C64, two VIC 20, two PLUS/4 instruction manuals. Three C16 manuals. VIC Graphics & Vic Revealed by Nick Hampshire. Send SAE with sufficient postage to Ray Hyman, 46 Southdale Road, Wavertree, Liverpool L15 4HZ, tel: (051) 733 9046

Wanted

WANTED: C64 & power unit. Must be in excellent condition. Please state price. Write to S A Wright, 22 Crown Street, Mansfield, Notts NG18 3JL

WANTED: PET hardware, software, books. ie The PET Revealed, manuals. If you have any you want to get rid of then send details. H/W preferably near Bradford. Graham Mitchell, 43 Cranbrook Avenue, Odsal, Bradford BD6 1JF

WANTED: SX64 in good condition. Ian Galletti. Tel: (0860) 745774 (home) or (0705) 664966 x3147 (office). Portsmouth

WANTED: Easyspell with documentation for use with Easyscript. Can anybody please help? Cost is not a problem! Contact Stuart M Cox, 31 St Katherines Road, Erith, Kent DA18 4DS. Tel: 01-311 7598

⁂